

2018

Office of Surface Mining Reclamation and Enforcement

The Kentucky
Department for
Natural Resources

Annual Evaluation Report



Prepared by:
The Lexington Field Office



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OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

Annual Evaluation Report
for the
Regulatory and Abandoned Mine Land Programs
Administered by the Department for Natural Resources
of
KENTUCKY
for
Evaluation Year 2018
July 1, 2017 to June 30, 2018

Prepared by
Lexington Field Office
August 2018

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Executive Summary

This 2018 Annual Evaluation Report contains information regarding the effectiveness of the Kentucky Department for Natural Resources (KYDNR) in the implementation of the Surface Mining Control and Reclamation Act of 1977 (SMCRA) during the period of July 1, 2017, through June 30, 2018. The Office of Surface Mining Reclamation and Enforcement (OSMRE) oversees the Regulatory and Abandoned Mine Lands (AML) Programs of KYDNR and encourages public input into the process. The OSMRE Lexington Field Office (LFO) staff participates in numerous public meetings, trainings and other events to encourage interaction and facilitate public participation. Every year, LFO notifies known stakeholders and media of its finished and planned activities and allows public input into the OSMRE/KYDNR Annual Performance Agreement.

Inspection and site visits are an integral part of OSMRE's oversight activities, but OSMRE also utilizes programmatic reviews involving experts in hydrology or engineering to investigate and identify potential problems. This report serves to document our evaluation of the effectiveness of the KYDNR Regulatory and Abandoned Mine Land Programs by discussing the results of OSMRE's inspection activities, as well as accomplishments and successes of the program, results of oversight topic reviews, and program problems or issues, including litigation. These topics are covered in separate sections of the report. Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at the OSMRE Lexington Field Office, 2675 Regency Road, Lexington, Kentucky, 40503. Reports are also available online at the following address: <http://www.odocs.osmre.gov/>.

Major Accomplishments and Innovations

The KYDNR continues to uphold the intent of SMCRA as identified in section 102 of the Act. SMCRA, and its implementing regulations, represent the nationwide minimum standards to which all coal mining operations are held. Below is a list of some accomplishments achieved by KYDNR during EY 2018.

- The KYDNR developed regulations during the EY to fully implement the provisions of Kentucky House Bill 234. These changes were submitted to OSMRE as a program amendment and given the program amendment number KY-259. This amendment is currently under review. The statutory change removes the requirement to permit the area overlying underground mine works (shadow area). The definition of "permit area" for mines will now mirror the federal definition, which will not include shadow area. Seven of the administrative regulations are being amended to revise the definition of "permit area" and insert a definition of "shadow area". A definition of shadow area was created to ensure KYDNR is still notified of potential impacts to shadow areas but would not be tied to the permit area. Not permitting shadow area has cost benefits to both the coal industry and to KYDNR. The savings to industry for calendar year 2016, for advertisements and fees would have been approximately \$76,500. Based on costs for not

permitting shadow area, the average savings for KYDNR would be approximately 467 hours and \$28,040.50 salary annually.

- Over the last two evaluation years (EY), KYDNR, with the assistance of OSMRE, has worked to replace the retiring fleet of vehicles within the Division. To date, the average mileage per vehicle is 57,047 and monthly maintenance costs have been reduced to \$9,364. This vehicle investment has resulted in a 62.54 percent savings in monthly maintenance expenses and an investment into the safety and productivity of inspection staff.
- The KYDNR continued to reduce the total amount of highwall at idled mining operations in the eastern Kentucky coalfields. Through cooperation with permittees, the Division of Mine Reclamation & Enforcement (KYDMRE) has helped facilitate reclamation of 224,000 feet of open, idle highwall in the state (since April 2016). This equates to an approximate reduction of \$175 million in reclamation liabilities.
- Kentucky Division of Abandoned Mined Lands (KYDAML) hosted the National Association of Abandoned Mine Land Programs annual conference in Lexington, KY on September 24-27, 2017. The conference was attended by members of 31 state and Tribal Programs, industry representatives, and others.
- The KYDAML continues to utilize the Abandoned Mine Land Reclamation Economic Development Pilot Program (AML Pilot Program) funding (\$30 million 2016 Grant and \$25 million 2017 Grant) to spur economic development activity on, or adjacent to, AML sites. Nine projects were chosen for the 2016 funding and ten projects were chosen for the 2017 funding. During the EY, seven of the nine 2016 project proposals are active, in either the design or construction phase; and 5 of the ten 2017 project proposals received initial OSMRE approval; one of these projects received final OSMRE approval and has a formal Memorandum of Agreement in place between the contractor and the Energy and Environment Cabinet.
- The KYDNR continues the use of unmanned aircraft systems (UAS) for both Active and Abandoned Sites. (As of the spring 2018, KYDAML is currently using six UAS). The KYDAML currently has five licensed pilots with other staff members interested in becoming licensed. New technologies will be combined with usage as much as possible to maximize the utility of this tool. These technologies may include Forward Looking Infrared Imagery (FLIR), photogrammetric processing, photogrammetry, geographic information systems, aerial imagery viewers, and mobile apps for flying.
- The KYDAML entered into a price contract memorandum of agreement to test, and possibly implement electrical resistivity geophysical surveys at AML sites to determine the presence or absence of sub-surface (mine) voids. This technology aids in subsidence eligibility determination and subsidence abatement reclamation. This method has the potential to be less expensive, less invasive, and more effective than drilling alone to determine whether or not a site has been undermined and is experiencing, or may experience, underground coal mine subsidence.

- **Success in Achieving the Purposes of SMCRA**

Offsite Impacts

The KYDNR issued 748 Notices of Non-Compliance (NNC) during EY 2018 containing 1,341 performance standard violations, of which 213 included off-site impacts. The KYDNR identified 243 measureable off-site impacts as part of these 213 enforcement actions. The 213 enforcement actions with off-site impacts involved 165 permits, representing approximately 11 percent of the 1,471 inspectable units. The remaining permits (approximately 89 percent) were free of off-site impacts. The target set for the Commonwealth for EY 2018 was 88 percent.

Reclamation Success (Bond Release and Reforestation)

Reclamation success is tracked both by the amount of reclaimed acreage of active mines and the number of AML projects reclaimed. Mine reclamation is considered to be a success when the land disturbed by surface and underground coal mining operations is restored to an equal to or better land use than the pre-mining land use. Reclamation Success is a measure of the amount of acres KYDNR releases through Phase III bond release. The KYDNR reported for EY 2018 that it granted bond releases for the following acreages: Phase I – 10,368 acres, Phase II – 10,231 acres, and Phase III - 9,430 acres. In EY 2018, KYDNR administratively released 4,874 acres.

The OSMRE and KYDNR also track the number of acres released with a reforestation component. In EY 2018, KYDNR granted Phase III bond release to 8,225 acres for permits having specific reforestation requirements including those with reforestation as a post mining land use. Assuming a survival rate of 450 trees per acre for each of the reforestation type categories, approximately 1,986,103 trees were established on bond released acres in EY 2018.

Abandoned Mine Land Reclamation

The AML reclamation is monitored through the number of Authorizations-to-Proceed (ATP) issued by OSMRE, acid mine drainage projects completed or submitted, and water supply restoration projects submitted. During EY 2018, KYDNR submitted 75 new project proposals to OSMRE requesting ATPs. Also, six water supply restoration projects were either under construction or proposed. These projects will account for 14 miles of new water line that will provide safe domestic water supplies for approximately 231 residential customers.

The OSMRE conducted a total of 255 inspections of KYDAML projects during EY 2018. This included 12 pre-authorization inspections, 47 pre-construction inspections, 125 active construction inspections, 60 final construction inspections, 10 follow-up inspections, and 1 citizen's complaint inspection.

The AML Pilot Program grants are to be used for community and economic development on or adjacent to abandoned mine lands. The purpose of projects funded from these grants is to stimulate economic growth. During this EY, Kentucky applied and was approved for a \$25,000,000 AML Pilot grant. This is in addition to \$30,000,000 awarded in FY 2016.

During this EY, KYDAML submitted 10 project proposals to OSMRE for review and conceptual approval. The OSMRE approved 8 of the 10 with the other 2 under review as of June 30, 2018. The KYDAML submitted requests for ATPs on six projects and the OSMRE provided authorization to proceed for all six. Those projects are in Bell, Clay, Leslie, Johnson, Martin, and Pike Counties.

Customer Service

Each evaluation year, LFO conducts a customer service study to evaluate KYDNR's performance regarding this aspect of their program. For this evaluation year, KYDNR's citizen complaint process was evaluated. Customer service studies are performed because, as specified in SMCRA Section 102, one of the purposes of the Act is to assure that the rights of landowners and other persons with a legal interest in the land or appurtenances thereto are fully protected from surface coal mine operational effects.

Citizen Complaints

During EY 2018, KYDNR investigated 290 Citizen Request for Inspections related to active mine permits. There were no Ten-Day Notices (TDNs) issued by OSMRE during EY 2018, as a result of citizen complaints. During EY 2018, no citizens requested informal reviews of the LFO's determinations regarding their citizen's complaints. During EY 2018, KYDNR received approximately 464 complaints regarding AML, of which 47 were deemed eligible for funding.

Reforestation Outreach

The KYDNR organized "Kentucky Reforestation Day" on March 28, 2018. The goal of the event was to bring all the divisions within the KYDNR together for a day in the field and to provide the Division of Mine Reclamation and Enforcement a setting to demonstrate to KYDNR division managers, supervisors, and KYDNR staff how the Forestry Reclamation Approach reforestation method is used to facilitate successful hardwood tree growth on surface coal mines. Volunteers for the Kentucky Reforestation Day event also included students from the University of Delaware, Appalachian Regional Reforestation Initiative (ARRI) coordinators, and OSMRE staff. Green Forests Work, a 501(c) (3) non-profit organization and ARRI partner, that works to re-establish healthy and productive forests on historically mined lands in Appalachia provided approximately 3,750 high-value hardwood tree seedlings, which were planted by 84 reforestation volunteers on 5.7 acres.

National Priority, Regional, and General Oversight Topic Reviews

National Priority Topic Reviews

No national priority oversight topic reviews were conducted during EY 2018.

Regional Oversight Topic Reviews

During EY 2018, OSMRE continued the development of the *Appalachian Regional Impoundment Study* and the *Underground Mine Pool Study*. OSMRE, after an initial kickoff meeting with KYDNR, proceeded to complete all site reviews and prepared a draft report that is under review by the Appalachian Region Impoundment Study Review Team. The Underground Mine Pool oversight study report, once finalized, will contain discussions of the reviewed permits, issues identified, and proposed resolution measures for all issues.

General Oversight Topic Reviews

Oversight Studies: OSMRE conducts topical oversight studies as part of the Annual Performance Agreement to ensure KYDNR is meeting the minimum standards specified in SMCRA. These topical oversight studies include: an evaluation of OSMRE Inspections, The Bond Forfeiture Report, The Fill Inventory, The Long-Term Treatment Inventory, and the Phase I Inspection Frequency Study.

Inspection and Enforcement: OSMRE Directive REG-8 establishes the minimum number of oversight inspections required for each state program. REG-8 mandate for OSMRE oversight in Kentucky identified 307 oversight inspections as the minimum required. In EY 2018, OSMRE conducted a total of 392 oversight-related inspections of which 382 counted directly toward the required REG-8 inspections. During EY 2018, 296 comprehensive random inspections, 10 comprehensive independent random sample inspections, and 9 partial inspections were conducted. The OSMRE observed 441 violations during oversight inspections.

Comprehensive random inspections are also used to measure industry compliance. The percent of permits with no observed violations during EY 2018 compliance was the lowest it has been in the last 10 years. During EY 2018, KYDNR completed a total of 6,315 complete inspections and 10,488 partial inspections. The KYDNR met frequency on 100 percent of the permits requiring inspections. During the 16,803 inspections conducted by KYDNR, 748 NNC were written and 1,341 violations were issued.

Bond Forfeiture Report: The Draft Bond Forfeiture Report for EY 2018 uses DAML's reclamation cost estimates and the total posted bond amount to determine if there is sufficient bond to reclaim the permit to permanent program standards. The report found four of the seven permits (57.1 percent) did not have sufficient bond. Forfeited increments were under-bonded by an average of \$66,700.23. If you exclude increment 2 of Xcell Energy and Coal Company 877-0175, on average the remaining forfeited increments were under-bonded by \$3,530.08. The DAML's cost estimates calculated the cost of reclamation to permanent program standards to be \$5,201,817.70. Total bond posted for the 33 increments forfeited equals \$3,000,710.00, which accounts for 57.7 percent of the total cost of reclamation. The reclamation estimates provided by DAML are estimates and can be more than the actual cost of reclamation. The approved program in Kentucky uses an alternate bonding system to ensure liabilities are fully covered. Any difference in the bond amount and actual cost of reclamation is made up from the Kentucky Reclamation Guaranty Fund.

Fill Inventory: During EY 2018, OSMRE and KYDNR collected information on the size and location of permitted excess spoil disposal fills for all new permits, amendments, and major revisions. The OSMRE and KYDNR found 94 permitting actions (24 new permits, 31 amendments, and 39 major revisions) in Calendar Year (CY) 2017 involving surface, underground, or other mining operations. The LFO and KYDNR found 10 permitting actions that contained information on 13 fills. The other 84 permitting actions did not involve fills.

Long-Term Treatment Inventory: The Kentucky long-term treatment inventory is a list of permits that require continued treatment in order to meet Kentucky Pollutant Discharge Elimination System requirements. The OSMRE conducts oversight inspections on all sites eligible to be removed from this list. During EY 2018, OSMRE was notified that 20 sites, from 10 permits were eligible to transition from the active to historical inventory. This eligibility is based on a year's worth of monitoring data that meets the Kentucky Pollutant Discharge Elimination System requirements without treatment. In addition, OSMRE conducted eight Long-Term Treatment Active Inventory Inspections (OMDAI) during EY 2018. Two additional inspections were conducted during the July 2018.

The Approved State Program

Regulatory Program Problems and Issues

The Kentucky State Program was conditionally approved in 1982. Part 732 of Title 30 of the Code of Federal Regulations (CFR) sets forth criteria and decisions to approve or disapprove state programs and program amendments. The KYDNR currently has three program amendments that are being reviewed by OSMRE.

733 Action

Part 733 of Title 30 CFR establishes requirements for the maintenance of State programs and procedures for substituting Federal enforcement of State programs and withdrawal of approval of State programs. In accordance with 30 CFR 733.12(b), OSMRE notified KYDNR on May 1, 2012, that bonding under the Kentucky program is inadequate to ensure the full reclamation of forfeited sites. Consequently, Kentucky immediately implemented emergency program changes to raise the site specific base bond amounts and the creation of a non-site specific supplemental fund, referred to as the Kentucky Guarantee Reclamation Fund (KGRF). OSMRE solicited comments on the proposed changes and summarized the program changes in the Federal Register (FR) on March 26, 2015 [80 FR 15953]. Kentucky's proposed program changes were approved with exceptions on January 29, 2018, and published in the Federal Register (83 Fed. Reg. 3948). The final rule outlined two options to begin the resolution of these exceptions, and required action within 60 days. The KYDNR and OSMRE agreed to initiate the pre-submission assistance process. Initiating this process will allow both the OSMRE and the Commonwealth to work on a mutually agreeable solution to the financial assurance of long term treatment sites. The OSMRE and KYDNR are currently working on a resolution to the exceptions listed in the final rule.

OSMRE Assistance – Regulatory and AML Programs

Grants

The OSMRE awards grants to the states annually, the Title V Administration and Enforcement (A&E) Regulatory Program grants are on a one year cycle, where the Title IV grants have a three year cycle. The final 2016 A&E grant awarded Kentucky a total of \$11,632,000 including indirect costs. Kentucky received \$1,441,801 to administer the Federal Lands Program which is 100 percent federally-funded. KYDNR de-obligated \$397,082.74 from the 2016 A&E grant for failure to match Federal funds. The amount awarded by OSMRE for the 2017 A&E grant was \$12,238,470 of which \$1,540,270 is to administer the Federal Lands Program.

During this EY, KYDNR submitted an application for its 37th annual Title IV grant. The request was for \$19,042,090.00 to fully fund the AML Reclamation Program.

Interagency Coordination

The KYDNR and OSMRE actively participate in meetings in which the sole purpose is to coordinate with other state and Federal agencies that have a vested interest in SMCRA activities. These other agencies are primarily responsible for administering the Clean Water Act, the Endangered Species Act, and the National Historic Preservation Act. The KYDNR and OSMRE also coordinate with Federal land managing agencies whenever permitting involves coal mining on federally owned lands.

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I. Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) established the Office of Surface Mining Reclamation and Enforcement (OSMRE) within the Department of the Interior. SMCRA provides authority to OSMRE to oversee the implementation of, and provide Federal funding for, the state and tribal regulatory and abandoned mine land (AML) programs that have been approved by the Secretary of the Interior as meeting the minimum standards specified by SMCRA. This report contains summary information regarding the Kentucky programs and the effectiveness of the Kentucky programs in meeting the applicable purpose of SMCRA as specified in Section 102. This report covers the period July 1, 2017, to June 30, 2018. Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at the OSMRE Lexington Field Office, 2675 Regency Road, Lexington, Kentucky, 40503. Reports are also available online at the following address: <http://www.odocs.osmre.gov/>.

List of Acronyms

The following acronyms are used in this report:

A&E	Administration and Enforcement
AMD	Acid Mine Drainage
AML	Abandoned Mine Lands
AML Pilot Program	Abandoned Mine Land Reclamation Economic Development Pilot Program
ARRI	Appalachian Regional Reforestation Initiative
ATP	Authorization-to-Proceed
CFR	Code of Federal Regulations
CHIA	Cumulative Hydrologic Impact Assessment
CIA	Cumulative Impact Areas
CO	Cessation Order
CY	Calendar Year
e-AMLIS	Abandoned Mine Land Inventory System
EEC	Energy and Environment Cabinet
EY	Evaluation Year

FLIR	Forward Looking Infrared Imagery
FR	Federal Register
FRA	Forestry Reclamation Approach
FY	Fiscal Year
GIS	Geographic Information System
KAR	Kentucky Administrative Regulations
KCA	Kentucky Coal Association
KPDES	Kentucky Pollutant Discharge Elimination System
KRGF	Kentucky Reclamation Guaranty Fund
KRS	Kentucky Revised Statutes
KYDAML	Kentucky Division of Abandoned Mine Lands
KYDNR	Kentucky Department for Natural Resources
LTT	Long-Term Treatment
NEPA	National Environmental Policy Act
NNC	Notice of Non-Compliance
NOI	Notice of Intent to Sue
NPDES	National Pollutant Discharge Elimination System
NTTP	National Technical Training Program
OMDAI	Long Term Treatment Active Inventory Inspection
OSMRE	Office of Surface Mining Reclamation and Enforcement
PEP	Protection and Enhancement Plan
PMLU	Post-Mining Land Use
RAM	Reclamation Advisory Memorandum
SMCRA	Surface Mining Control and Reclamation Act of 1977
TDN	Ten-Day Notice

TIPS	Technical Innovation and Professional Services
UAS	Unmanned Aircraft Systems
USFWS	United States Fish and Wildlife Service
WET	Whole Effluent Toxicity

II. Overview of the Coal Mining Industry in Kentucky

Kentucky is made up of five physiographic sub-regions, including the Western and Eastern Kentucky Coalfields. The Western Kentucky Coalfield is part of the Interior Low Plateau physiographic province, comprised of gently rolling hills consisting mainly of farmland and unmanaged forestland. The Eastern Kentucky Coalfield is part of the Appalachian Plateau physiographic province, at the edge of the Appalachian Mountains. The terrain is comprised of steep sloped hills of mainly unmanaged forestland.

Kentucky's coal reserve base is the fifth largest in the nation and consists entirely of bituminous coal. Coal was first discovered in Kentucky in 1750 by Dr. Thomas Walker. The first commercial mine, known as the "McLean drift bank" was opened in 1820 in Muhlenberg County in the Western Kentucky Coalfield. Kentucky was the nation's leading coal producer for over a decade before 1988 when production in Wyoming and West Virginia exceeded that in Kentucky. Kentucky, now the fifth-largest coal-producing state, produced more than 42 million short tons of bituminous coal in calendar year (CY) 2017. We should note, information on coal sales is gathered and reported on the CY rather than the EY. Coal production in Kentucky has continued the downward trend that began in the early 1990's, decreasing five percent in CY 2017 from the previous year. Surface mines accounted for 10 million tons (24 percent) and underground mines accounted for 32 million tons (76 percent) of the coal mined in CY 2017. The decline in coal production through time is illustrated in Figure 1.

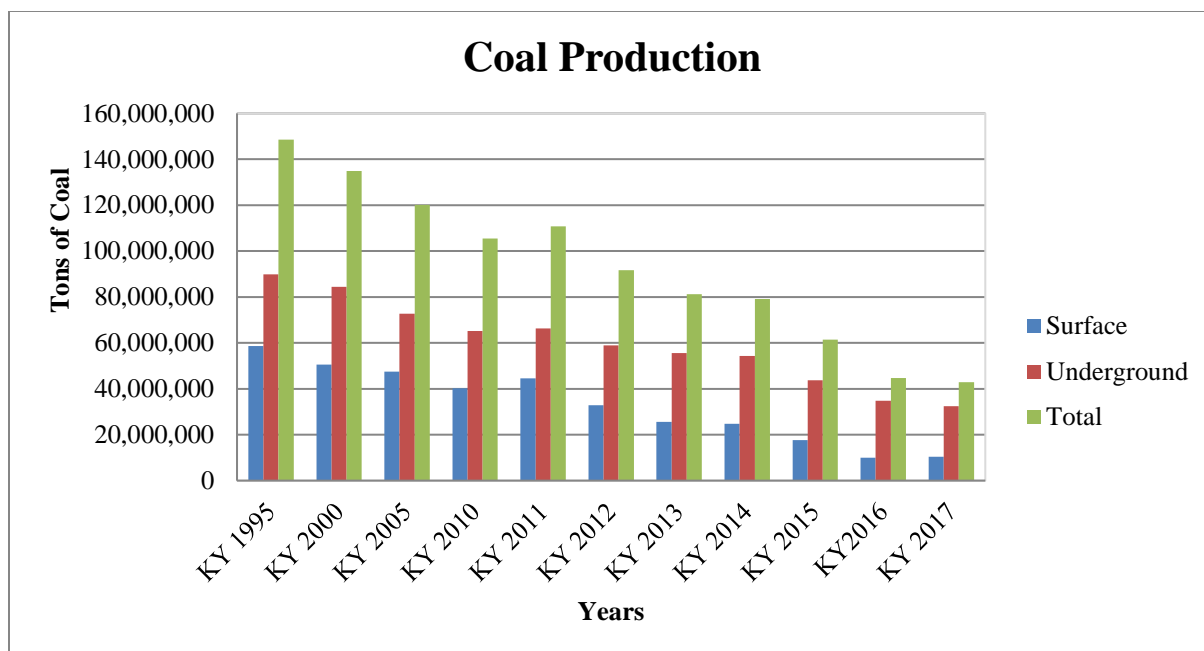


FIGURE 1.—Coal production from selected years starting in 1995.

With the decline in the industry over the past few years, OSMRE has begun to track the number of bankruptcies that occur during each EY. During EY 2018, one company filed for Chapter 11 bankruptcy on mining permits in Kentucky: Armstrong Energy, Inc.

The KYDNR currently inspects 1,471 coal mining permits: 653 surface mines, 510 underground mines, and 303 roads, preparation plants, refuse disposal areas, and other ancillary facilities. Figure 2 shows the variation in numbers of different types of permits since 1985.

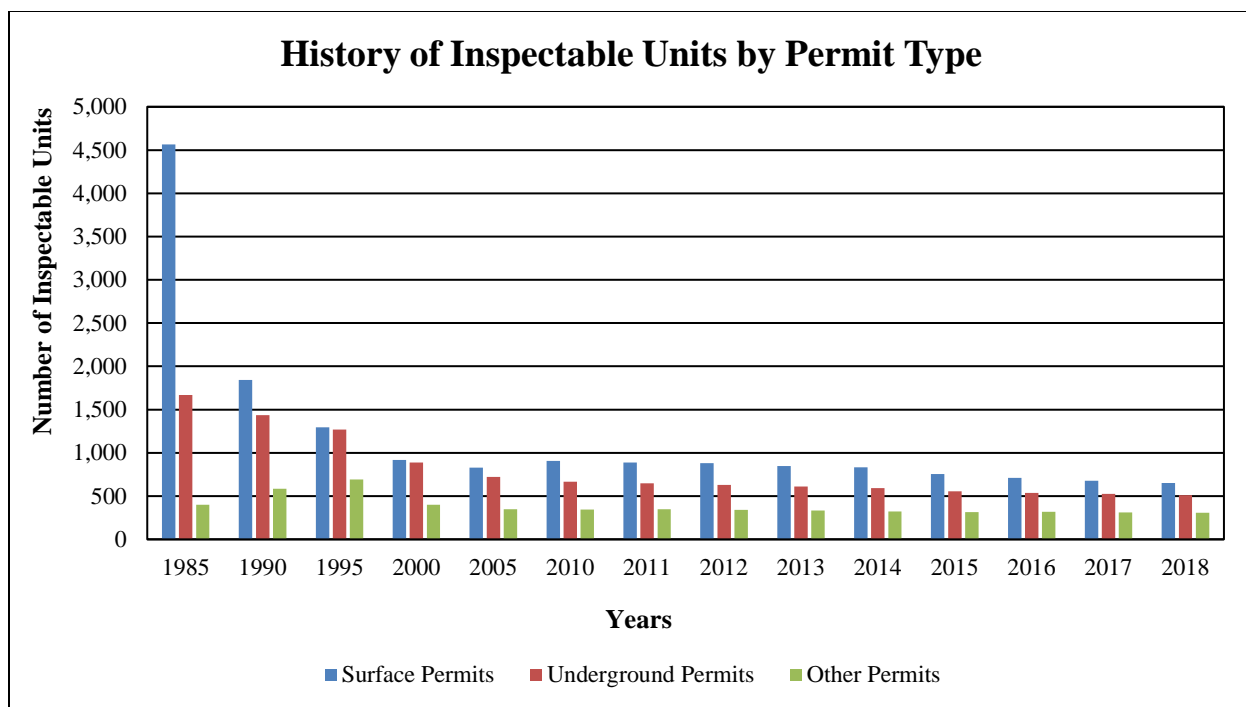


FIGURE 2.—The number and type of permits for selected years, from 1985 to the present.

Figure 2 shows a sharp decline between EY 1985 and EY 1990, and a less pronounced, but still significant rate of decline from EY 1990 to EY 2005, when the trend stabilized. Since EY 2010, the total number of permits has steadily declined on average 3 percent each year, with 1,471 total permits in EY 2018. The information for inspectable units is shown in Table 10 of Appendix 1. The 1,471inspectable units include both permanent program permits and interim permits. The number of permits being issued has declined in much the same manner as the number of active permits.

Figure 3 shows the decrease in the number of newly issued permits from the last seven years. In EY 2012, KYDNR issued 77 new permits compared to 23 issued during EY 2018. A slight increase was observed over the 17 permits issued in EY2017.

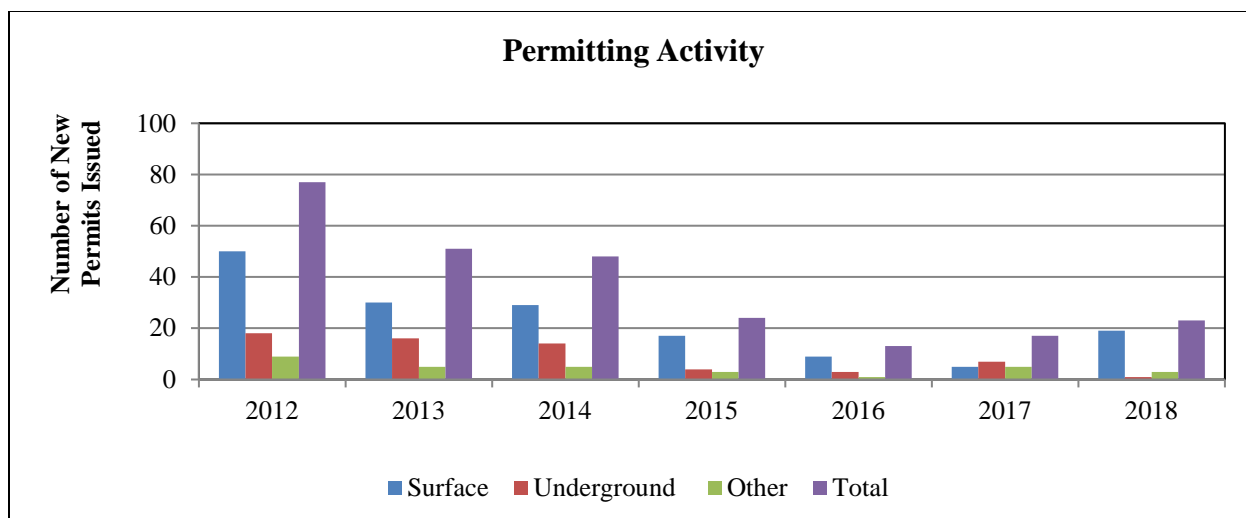


FIGURE 3.—The number of new permits issued for the last seven EYs by permit type.

III. Overview of the Public Participation Opportunities in the Oversight Process

Prior to the beginning of each EY, OSMRE solicits suggestions from citizen and industry groups on oversight topics for the upcoming year. The draft EY 2018 Performance Agreement was sent out to potential stakeholders for input in June 2017. There were no comments received for this Performance Agreement.

This Performance Agreement describes proposed oversight activity for the EY and identifies specific issues to be addressed by oversight inspections, as well as joint special studies to be conducted on selected components of the State's Program. The EY 2018 Performance Agreement was finalized on June 30, 2017.

The enactment of SMCRA created many avenues for citizen involvement. Citizens have a statutorily defined opportunity for input in practically every phase of the surface mining program, from permit issuance to bond release. Since SMCRA's enactment in 1977, coalfield citizens have exercised those rights to influence policies and programs that govern surface coal mining and reclamation in America.

Kentucky has several citizen organizations that take part in public participation opportunities regarding coal mining issues, including: Kentuckians for the Commonwealth, Kentucky Resources Council, Kentucky River Keeper, Kentucky Waterways Alliance, Ohio Valley Environmental Coalition, Sierra Club, Alliance for Appalachia, Appalachian Citizen's Law Center, Appalachian Mountain Advocates, Appalachian Voices and Heartwood.

In addition to citizen group participation, industry groups also provide input to the oversight process. There are three major coal associations in Kentucky: the Kentucky Coal Association, the Western Kentucky Coal Association, and Coal Operators and Associates, Inc. Other pro-industry groups active in the regulatory process are Friends of Coal and Faces of Coal.

A. Notice of Intent to Sue

Section 520 of SMCRA allows citizens to file civil actions against the United States Government, a governmental instrumentality, an agency, or any other person who is in violation of any rule, regulation, order, or permit issued pursuant to the Act. A Notice of Intent to Sue (NOI) is sent to notify the coal industry, and/or, state or Federal regulatory authority that a citizen intends to file a civil action.

There were no NOIs filed against coal companies or KYDNR during EY 2018. There were two NOIs (and subsequent civil suits) filed against OSMRE which specifically dealt with the Kentucky program.

On March 29, 2018 The Kentucky Coal Association (KCA) filed suit against the Secretary of the Interior, and Acting Director of the Office of Surface Mining Reclamation and Enforcement, with the United States District Court for the Eastern District of Kentucky Frankfort Division.

The KCA brings four counts against the defendants:

1. The Secretary's Disapproval of 405 KAR 10:015 Section 8(7) was inconsistent with law
2. The Secretary's Disapproval of 405 KAR 10:015 Section 8(7) was arbitrary and capricious
3. The Secretary's Disapproval of 405 KAR 10:015 Section 8(7) was arbitrary and capricious, an abuse of discretion and otherwise not in accordance with law
4. Administrative Procedures Act; 5 U.S.C. 553 and 5 U.S.C. 706
 - a. Claims OSMRE did not follow the procedures set forth in the Administrative Procedures Act.

On March 30, 2018, The Kentucky Energy and Environment Cabinet (EEC) filed suit against the Secretary of the Interior, and Acting Director of the Office of Surface Mining Reclamation and Enforcement, with the United States District Court for the Eastern District of Kentucky Frankfort Division.

The EEC brings five counts against the defendants:

1. The Secretary's Disapproval of 405 KAR 10:015 Section 8(7) was inconsistent with law
2. The Secretary's Disapproval of 405 KAR 10:015 Section 8(7) was arbitrary and capricious
3. The Secretary's Disapproval of 405 KAR 10:015 Section 8(7) was arbitrary and capricious, an abuse of discretion and otherwise not in accordance with law
4. Administrative Procedures Act; 5 U.S.C. 553 and 5 U.S.C. 706
 - a. Claims OSMRE did not follow the procedures set forth in the Administrative Procedures Act.
5. Federalism
 - a. Claims OSMRE ignored Executive Order 13132-Federalism

The parties filed joint motions for stays of the cases in order to allow negotiations that could lead to resolution of the disputes. The joint motion for stay in the KCA case was granted on July 2, 2018, and the matter was stayed for 90 days. The joint motion in the EEC case was granted on

August 1, and the matter was stayed for 90 days. KCA and OSMRE filed a joint motion for an additional stay. The motion was granted, extending the stay until January 7, 2019. OSMRE and KEEC filed a joint motion seeking an extension of the stay in the EEC case. The motion was granted, extending the stay until January 7. Third motions for stay were filed in both matters, and granted. The KCA case is now stayed until April 6, 2019; the EEC case is now stayed until April 28, 2019.

Additional actions were taken during EY 2018 as a result of the NOI sent by M.L. Johnson Family Properties, LLC (Johnson Family) in EY 2014 and in subsequent lawsuits. Johnson Family claims that the operator, Premier Elkhorn, did not have a valid right-of-entry to surface mine the coal on a particular tract in Pike County, Kentucky because all of the surface owners of that tract did not give consent to surface mine. In EY 2014, in response to a court order in *Johnson Family v. Jewell (Johnson Family I)*, OSMRE issued a cessation order. OSMRE subsequently terminated the Cessation Order (CO) when Premier Elkhorn amended its permit to establish an alternate right-of-entry. Soon thereafter, Johnson Family filed a second lawsuit challenging OSMRE's termination of the CO, *Johnson Family v. Zinke (Johnson Family II)*.

In EY 2018, the U.S. District Court for the Eastern District of Kentucky issued a decision in *Johnson Family II*, which upheld OSMRE's termination of the Cessation Order. Johnson Family has appealed this decision to the U.S. Court of Appeals for the Sixth Circuit and briefing has been completed. In addition, Johnson Family filed a motion to amend its complaint in *Johnson Family I*. The United States has opposed that motion and filed a motion to dismiss on the basis that *Johnson Family I* is now moot. Briefing on both *Johnson Family I* motions is ongoing at the end of this EY.

IV. Major Accomplishments and Innovations

The KYDNR continues to uphold the intent of SMCRA, as identified in Section 102 of the Act. SMCRA and its implementing regulations represent the nationwide minimum standards to which all coal mining operations are held.

The KYDNR developed regulations during the EY to fully implement the provisions of House Bill 234. The statutory change removes the requirement to permit the area overlying underground mine works (shadow area). The definition of "permit area" for mines will now mirror the Federal definition and associated with the bonded area, which will not include shadow area. These changes were submitted to OSMRE as a program amendment and given the program amendment number KY-259 and are currently being reviewed.

Seven of the administrative regulations are being amended to revise the definition of "permit area" and insert a definition of "shadow area". The KYDNR created a definition of shadow area to ensure the Department is still notified of potential impacts to shadow areas, but would not be tied to the permit area.

The Department will continue to permit "underground only" mines within Kentucky. These mines are those that only have underground acreage in the Commonwealth and has an entrance in a neighboring state or associated with another permit that share the same opening. The 405

KAR 20:090 was created to address underground only mines and follows the other special mining types in 405 KAR 8:050 and has an administrative regulation dedicated to special performance standards.

The KYDNR maintains that not permitting the shadow area has cost benefits to both the coal industry and KYDNR. The savings were determined by taking the number of Originals, Amendments, Major Revisions and Renewals for calendar years 2016 and 2017 that would have been affected by the change in permitting shadow area. From this data, total savings for each year were calculated and averaged to determine a yearly average savings.

The savings to industry for calendar year 2016, for advertisements and fees would have been approximately \$76,500. For the calendar year 2017, savings to industry for advertisement costs and fees costs would have been approximately \$50,200. There is an additional savings to the industry based on reduced engineering and consulting costs for compiling applications and co-tenancy information that are not reflected in the totals above.

The savings for KYDNR are based on permit application review time and salaries. For the CY 2016, savings for review time were approximately 1,366 hours and \$32,995.60 in salary. For the CY 2017, savings for review time were approximately 901 hours and \$21,684.24 salary. Based on costs for not permitting shadow area, the average savings would be approximately 467 hours and \$28,040.50 salary annually.

Additionally, over the last two EYs, KYDNR, with the assistance of OSMRE, has worked to replace the retiring fleet of vehicles within the Division. To date, the average mileage per vehicle is 57,047 and monthly maintenance costs have been reduced to \$9,364. This vehicle investment has resulted in a 62.54 percent savings in monthly maintenance expenses and an investment into the safety and productivity of inspection staff.

The KYDNR has also continued to reduce the total amount of highwall at idled mining operations in the Eastern Kentucky Coal fields. Through cooperation with permittees, the Division of Mine Reclamation & Enforcement (KYDMRE) has helped facilitate reclamation of 224,000 feet of open, idle highwall in the state (since April 2016). This equates to an approximate reduction of \$175 million in reclamation liabilities.

V. Success in Achieving the Purposes of SMCRA

B. A. Off-site Impacts

How effectively KYDNR's program protects the public and the environment from off-site impacts is evaluated by identifying and analyzing known off-site damage from surface and underground coal mining permits in Kentucky. During each EY, KYDNR supplies OSMRE with all NNCs and COs, along with associated inspection reports, which document off-site impacts. OSMRE analyzes this information and documents the magnitude and identifies the root cause of each off-site impact.

The KYDNR issued 748 NNCs during EY 2018 containing 1,341 performance standard violations, of which 213 included off-site impacts. The KYDNR identified 243 measureable off-site impacts as part of these 213 enforcement actions. Off-site impacts were identified based on KYDNR's documentation and the OSMRE reviewer's interpretation of the enforcement language used in the inspection reports associated with the enforcement action. The OSMRE reviewer contacted the issuing KYDNR inspector when more information was needed to properly evaluate an offsite impact.

The 213 enforcement actions with off-site impacts involved 165 permits representing approximately 11 percent of the 1,471 inspectable units. The remaining permits, approximately 89 percent, were free of off-site impacts. The NNCs with off-site impacts were analyzed for type of incident, resource affected, degree of impact, and root cause.

As displayed in Figure 4, the percentage of permits free of off-site impacts decreased from a high of 93 percent in EY 2006 to a low of 79 percent in EY 2010. A rising trend of permits free of off-site impacts has continued since the low of EY 2010. However, the percentage of permits free of off-site impacts decreased from approximately 90 percent during EY 2017 to approximately 89 percent during the current EY. The target set for the Commonwealth for EY 2018 was 88 percent.

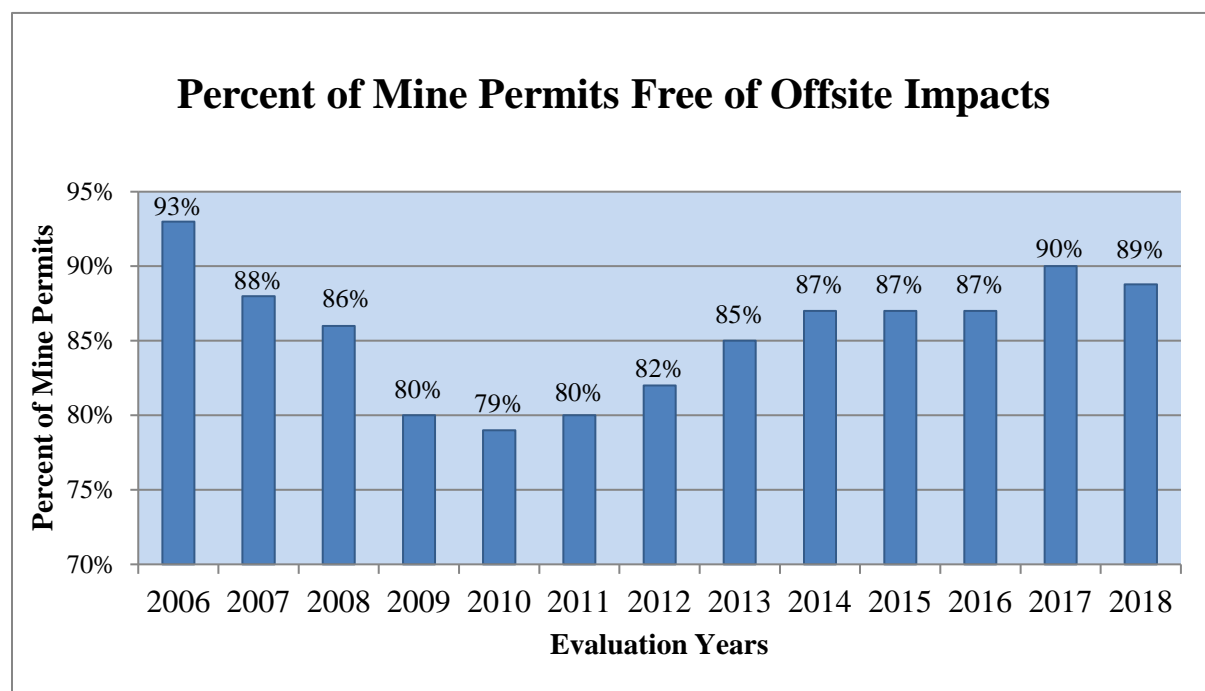


FIGURE 4.—The total percentages of permits free of offsite impacts from EY 2006 to EY 2018.

Of the 243 measurable off-site impacts, 40.33 percent were caused by hydrology issues; 31.28 percent were due to land stability issues; 25.93 percent were for encroachment impacts; and 2.47 percent were caused by other (including public roadway affect and blasting) impacts.

Based on the data collected, the total off-site impacts from coal mining operations for EY 2018 included 263.95 acres of land, 24.05 miles of streams, and 10 structures. No ground water wells were reported to have been impacted during the EY. The findings for off-site impacts indicate that approximately 58.85 percent of the measured incidents involved land, 36.63 percent involved water, 3.70 percent involved structures, and two impacts (0.82 percent) involved people. The majority of impacts -approximately 88.07 percent - were minor incidents, while 7 percent were considered moderate, and 4.94 percent were considered major. The root causes of the off-site impacts included 60.78 percent attributed to operator negligence, 20.69 percent to improper maintenance, 11.21 percent to improper permitting activities, 4.74 percent to improper construction techniques, and 2.59 percent were linked to unanticipated natural events (such as extreme rain-fall events).

C. Reclamation Success

Mine reclamation is considered to be a success when the land disturbed by surface and underground coal mining operations are restored to a land use equal to or higher than the pre-mining land use. Several tables of Data for States and Tribes (DST Tables) for the EY are presented in Appendix 1 of this report. The DST Tables provide a measure of the success in reclamation for each EY. Reclamation success is considered to be directly related to the number of acres KYDNR processes through Phase III bond release. The standards of Phase III bond release ensure that land disturbed by mining is restored to an equal to or higher land use. Reclamation performance bonds are collected to provide the financial assurance that all permanent performance standards will be met, including the restoration of, or improvement in post mining land use if the operator is unable to perform this reclamation. In accordance with SMCRA, the Kentucky program uses a phased bond release system to allow permittees to reduce their bond liability as certain phases of reclamation are successfully achieved. Phase I requires that the disturbed area be backfilled, graded, topsoil spread, seeded, mulched, and provided with sediment control. Phase II requires that vegetation meeting the standards for re-vegetation success has been established in reclaimed areas, in accordance with the approved reclamation plan. The reclaimed area must not contribute suspended solids to stream flow or runoff outside the permit area. Phase III requires that: the reclaimed area successfully meets all surface coal mining and reclamation standards in accordance with the approved reclamation plan; the reclaimed land is capable of supporting the approved Post-Mining Land Use (PMLU) requirements and; the applicable liability period has expired. During mining, operators are required to reclaim in a contemporaneous manner. This helps ensure that the required standards will be met as the permit becomes eligible for phased bond releases. The OSMRE reviews compliance data from both KYDNR and OSMRE inspections to ensure that operators are in compliance with contemporaneous reclamation requirements.

1. Phase III Bond Release

In Appendix 1, DST Table 6, KYDNR reported for EY 2018 that it granted bond releases for the following acreages: Phase I – 10,367 acres, Phase II – 10,231 acres, and Phase III - 9,430 acres. In EY 2018, KYDNR administratively released 4,873 acres. These administrative releases include areas that were permitted, but not mined. The majority of the PMLUs associated with phase III bond release were 43 percent (4,035 acres) Hayland/pasture, 40 percent (3,817 acres) fish and wildlife habitat and 16 percent (1,463 acres) forestland.

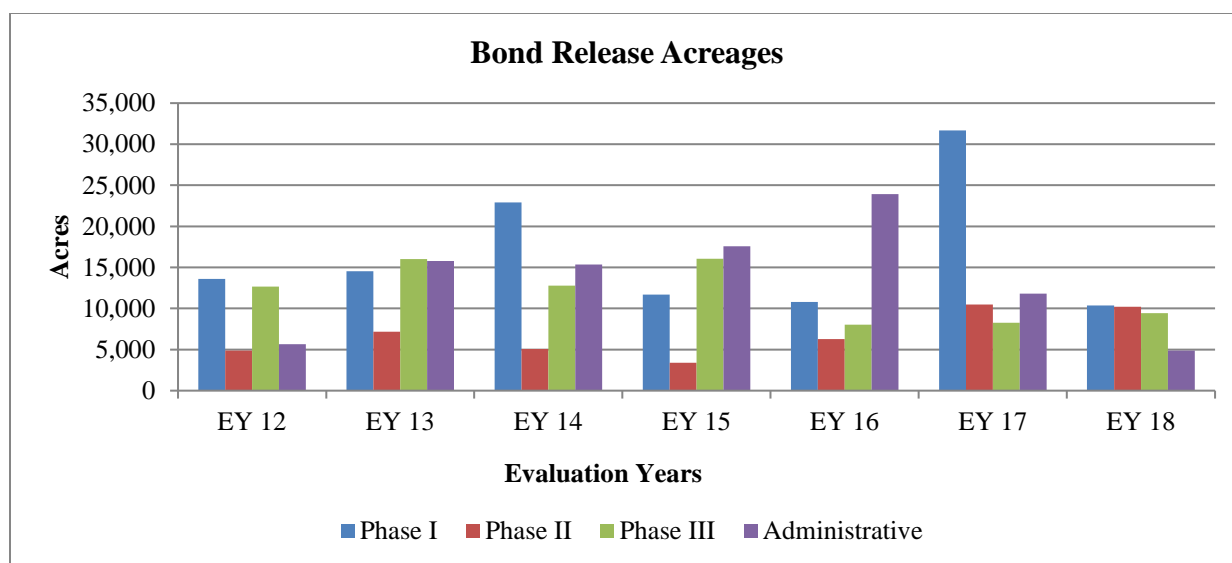


FIGURE 5.—Acres granted bond release over the last seven EYs for Phases I, II, III, and administrative release.

As part of OSMRE’s oversight role, random sample inspections include permits that have received Phase I bond release. Out of the 65 such sites randomly inspected during EY 2018, 27 were found to be in violation, with 69 performance standards cited.

The workplan for the regional underground mine pool evaluation study required OSMRE to review all underground mine permits applying for Phase III bond release. The OSMRE reviewed 41 permits through joint Phase III bond release inspections with KYDNR. There were 10 of the 41 permits evaluated for the regional underground mine pool study. The remainder of the permits included surface mines, preparation plants, and other ancillary permits. Two permits were found to be in violation with three performance standards cited by KYDNR.

2. Contemporaneous Reclamation

The KYDNR monitors contemporaneous reclamation compliance during field inspections. The State uses both contemporaneous reclamation and backfilling and grading performance standards to cite contemporaneous reclamation non-compliances.

Evaluation of State Compliance Data: KYDNR wrote 748 notices of non-compliance during EY 2018, citing 1,341 violations. Of these violations, 59 were related to contemporaneous reclamation standards and 106 to backfilling and grading standards. This represents about 12 percent of the total violations written by KYDNR during EY 2018. KYDNR also reported that they received 290 citizen complaints during EY 2018. Four complaints were investigated for contemporaneous reclamation resulting in one violation being issued.

Evaluation of OSMRE Compliance Data: OSMRE conducted 315 comprehensive and partial oversight inspections during EY 2018 and documented 429 violations. Of these, 39 were contemporaneous reclamation violations with all but four previously cited by KYDNR. There were 59 other backfilling and grading violations cited during EY 2018. Together approximately

23 percent of all violations observed by OSMRE on inspections for the evaluation year were related to contemporaneous reclamation or backfilling and grading.

3. Reforestation

Reforestation is another measure that contributes to reclamation success. The KYDNR annually reports to OSMRE the number of acres that were permitted with a PMLU reforestation component. The KYDNR also reports the number of acres with a reforestation component that received a Phase III bond release. The PMLU categories that commonly utilize reforestation and the Forestry Reclamation Approach (FRA) are Forest Land and Fish and Wildlife. Some permits, which have a combination of PMLUs, may intermittently implement the use of FRA to achieve permit specific conditions such as Indiana Bat Protection and Enhancement Plans (PEP). The following table summarizes the permitting activity during EY 2018 as it relates to reforestation. In EY 2018, 979 acres were permitted to be reclaimed using the FRA.

<i>Reforestation Type</i>	<i>Acres Permitted EY 2018</i>	<i>Approximate No. of Trees (Assuming re-stocking rate of 680 stems/acre)</i>	<i>Min.% Acreage Requirement for Reforestation</i>
<i>Forestland</i>	1,877.73	1,276,856	100%
<i>Fish and Wildlife</i>	4,589.48	2,184,593	30%
<i>Total Acreage Permitted EY 2018</i>	10,936.82		
<i>Total Estimated Trees</i>		3,461,448	

TABLE 1. —Table of the acreages and number of trees to be planted on the different post mining land uses involving reforestation.

<i>Reforestation Type</i>	<i>Acres Released EY 2018</i>	<i>Approximate No. of Trees (Assuming survival rate of 450 trees/acre)</i>	<i>Min.% Acreage Requirement for Reforestation</i>
<i>Fish and Wildlife</i>	2,517.21	267,045	30%
<i>Forestland</i>	1,932.73	869,729	100%
<i>Combination Fish and Wildlife and Forestland</i>	3,774.76	849,329	50%
<i>Total Acreage Released EY 2018</i>	8,224.7		
<i>Total Estimated Trees</i>		1,986,103	

TABLE 2. —Table of the number of acres and trees surviving on sites granted Phase III bond release during EY 2018.

4. Experimental Practices

The OSMRE encourages the development of experimental practices as a means of demonstrating the effectiveness and economic feasibility of new mining and reclamation practices or to provide innovative post-mining land use alternatives. The primary responsibility, when processing experimental practice applications, is to assure that the findings meet the requirements of 30 CFR 785.13(d) and OSM Directive REG-7 dated April 24, 1992. Approvals of experimental practices are Federal actions requiring compliance with the National Environmental Policy Act of 1969 (NEPA), as amended (P.L. 91-190). Environmental documents submitted for NEPA compliance must meet the requirements of REG-7 and the OSMRE NEPA Handbook (REG-1).

On July 18, 2018, OSMRE conducted an experimental practice close-out site visit at the KC Coals site located in Johnson County. The experimental practice was approved for the retention of high walls for industrial/ commercial development. OSMRE agrees with the KYDNR's findings that the experimental practice was a success and has recommended this experimental practice for close-out.

D. Customer Service

1. Citizen Complaints

OSMRE gathers data annually on citizen complaints. During EY 2018, the KYDNR investigated 290 Citizen Request for Inspections related to active mine permits. There were no Ten-Day Notices (TDNs) issued by OSMRE during EY 2018, as a result of citizen complaints. During EY 2018, no citizens requested informal reviews of LFO's determinations regarding their citizen's complaints.

In addition to new Citizen Request for Inspections, KYDNR had 69 complaints that remained outstanding and/or unresolved from EY 2017; therefore, the total number of complaints to be investigated and resolved for EY 2018 was 359. Seventy-six complaints remained unresolved at the end of in EY 2018.

Of the 290 Citizen Request for Inspections reported, 355 violations of performance standards were alleged by the complainants. KYDNR issued 33 NNCs as a result of the Citizen Requests for Inspection investigations, citing 61 performance standards. Table 3 below gives a breakdown of each performance standard cited during the EY.

Performance Standard	Total Amount	Performance Standard	Total Amount
Off Permit Disturbance (OD)	11	Roads (AC)	2
Water Quality (WQ)	12	Air Resources Protection (AP)	3
General Hydrologic (HR)	9	Other Permit Conditions (OT)	1
Sedimentation Ponds (SC)	4	Contemporaneous Reclamation (CR)	1
Effluent Limitations (EL)	8	Blasting (UE)	3
Disposal of Excess Spoil (DS)	2	Water Monitoring (WM)	1
Diversions (DV)	2	Method of Operation (OM)	2

TABLE 3.—Table showing the performance standards cited as a result of a citizen request for inspection.

The numbers of citizen complaints continued to decrease in EY 2018, decreasing by seven from the previous EY. The graph below shows this reduction throughout the years. The decrease in mining activity in the state correlates with a decrease in citizen complaints.

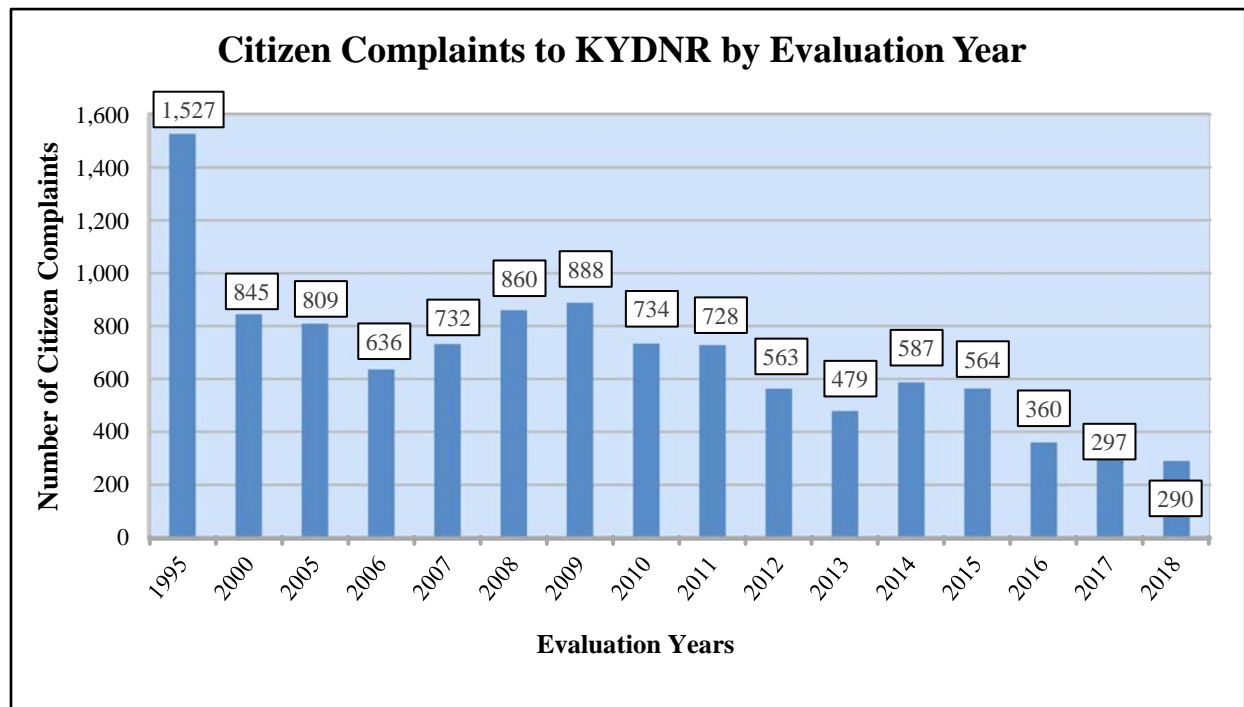


FIGURE 6.—Graph showing the number of citizen complaints received each year by KYDNR since evaluation year 1995.

2. Reforestation Outreach

The Kentucky Department of Natural Resources reforestation outreach provides opportunities and information to civic groups, elementary, high school, and college level students on surface coal mining reforestation technology. The KYDNR organized the “Kentucky Reforestation Day” on March 28, 2018. The goal of the event was to bring all the divisions within the KYDNR together for a day in the field and to provide the Division of Mine Reclamation and Enforcement a setting to demonstrate to KYDNR division managers, supervisors, and KYDNR staff how the FRA reforestation method is used to facilitate successful hardwood tree growth on surface coal mines.



IMAGE 1.— KYDNR staff and volunteers plant seedlings on the Rockcastle River Wildlife Management Area. 2018 KYDNR Kentucky Reforestation Day Event.

The reforestation site is located on the Rockcastle River Wildlife Area in Pulaski County and is managed by the Kentucky Department of Fish and Wildlife Resources. The site was surface mined for coal and reclaimed more than two decades ago using traditional post-law techniques. Traditional post-law reclamation techniques result in heavily compacted soils that are oftentimes seeded with aggressive, non-native grasses and legumes which can hinder the development of native forests.

Volunteers for the Kentucky Reforestation Day event also included students from the University of Delaware, ARRI coordinators, and OSMRE staff. Green Forests Work, a 501(c) (3) non-profit organization and ARRI partner that works to re-establish healthy and productive forests on historically mined lands in Appalachia, provided the site preparation using the Forestry Reclamation Approach and approximately 3,750 high-value hardwood tree seedlings which were

planted by 84 reforestation volunteers on 5.7 acres. The project also provided an opportunity for the volunteers to learn about the American Chestnut Foundation's experimental back-crossed American chestnut project and to inter-plant seedlings on the site. The back-crossed American chestnut seedlings were generously provided by The American Chestnut Foundation.

National Priority and General Oversight Topic Reviews

OSMRE conducted several National Priority and General Oversight Topic Reviews during the evaluation year. The following reviews were joint studies with KYDNR, with team members representing both OSMRE and KYDNR. The subject matter of these types of reviews are mutually agreed to by OSMRE and KYDNR each year as a part of the Annual Performance Agreement. Below is a summary of each review conducted during the evaluation year. If the summary references a complete report, these are available for review and copying at the OSMRE Lexington Field Office 2675 Regency Road, Lexington, Kentucky, 40503 and are also available online at the following address: <http://www.odocs.osmre.gov/>.

A. National Priority Reviews

The OSMRE did not conduct any national reviews in EY 2018.

B. Regional Oversight Topic Reviews

1. Documentation of Kentucky's Cumulative Hydrologic Impact Assessment (CHIA) Program

The OSMRE Appalachian Region has initiated a review of KYDNR's CHIA process. This initial review is the first of four phases being used to evaluate CHIAs in the Kentucky, Maryland, Ohio, Pennsylvania, West Virginia and Virginia state regulatory programs and the Tennessee Federal Regulatory Program. The purpose of the evaluation is to document the CHIA processes currently being used in each state and determine whether the state regulatory authorities and the OSMRE Knoxville Field Office are implementing the CHIA process as required by the applicable statutes, regulations, and internal policies and procedures. In addition, the review will document the following information regarding the specific CHIA processes:

1. Size of cumulative impact areas (CIAs).
2. Criteria for establishing monitoring points (trend stations) and determining if any such monitoring points match the CIAs or are used in any way to validate CHIAs.
3. Differences between surface and groundwater CIAs.
4. Methods of evaluating impacts both to the quantity and quality of surface and ground waters.
5. Definition of material damage.
6. Thresholds for determining material damage.
7. Events that trigger a new or revised CHIA.

OSMRE documented the KYDNR CHIA process by reviewing existing policies and guidelines governing the CHIA process and interviewing permit review staff. KYDNR provided OSMRE with a list of all new permits, amendments and major revisions processed since August 2010.

From this list, 18 CHIA's were randomly selected for review. These CHIA's and any pertinent permit documents were reviewed as part of the process. A standardized CHIA Data Collection Form developed by OSMRE was completed using information obtained during the policy review, staff interviews, and permit reviews. The reviews have all been completed and a draft report was prepared. The draft report was given to KYDNR for comment and will be finalized at the beginning of EY 2019.

2. Impoundment Study - Appalachian Regional Impoundment Study

This regional study evaluated KYDNR's permit review processes regarding the potential for impounded coal mine waste and water to "breakthrough" into adjacent and subjacent underground mines. Determination of breakthrough potential was evaluated by OSMRE in accordance with standard engineering and dam safety practices, approved state and federal regulations, and the following parameters:

- The presence or absence of minable coal seams adjacent and subjacent to coal mine waste slurry impoundments.
- The extent to which the operator investigated underground mine maps and other information to evaluate the nature and extent of adjacent and subjacent underground mining within 500 feet of or below an impoundment.
- For cases where underground mines were determined to exist in the vicinity of an impoundment, the steps taken to assess the potential for fine-waste slurry to flow into the underground mines following a breakthrough and to prevent a breakthrough from occurring.

During EY 2016, sites were selected and a kickoff meeting was conducted. For the sites selected, permit evaluations and site visits were conducted. Each permit evaluation included a review of pertinent documents, information, and data in the coal waste impoundment permit-application and inspection-and-enforcement files. All site visits have been completed and a draft report is currently under review with the KYDNR and is expected to be finalized during EY 2019.

3. Underground Mine Pool Study

The underground mine pool study is a regional oversight effort that was designed to assess whether or not regulatory authorities are appropriately considering post closure hydrology and the pollution potential (current and future) of water that accumulates in underground mines. Long-term control, treatment, and maintenance of underground mine pools may be necessary to prevent problematic pollutional discharges in accordance with 30 CFR § 800.40 (b) (1) and 405 KAR 10:040 Section 1 (4) requirements. This study also evaluates the adequacy of the financial assurances that must be in place if the operator ceases to provide the necessary control and treatment and this work has to be performed by the regulatory authority.

As part of the EY 2018 regional oversight study, OSMRE reviewed 10 Phase III underground mine bond releases. The inspections were generally performed in conjunction with the KYDNR

Bond Release Specialist. OSMRE reviewed the bond release documentation submitted by the permittee, typically consisting of a bond release application, planting report, notification letters, advertisements, and other pertinent information. Also, OSMRE reviewed pertinent portions of the permit application, the final underground mine map, as well as the maps for adjacent underground and surface mines. The location of face-ups and punch-outs, as well as areas with high potential to discharge, were identified through the map reviews. The outcrop barrier thickness, the potential for mine pool development, and the likelihood of a pollutorial discharge were also evaluated.

Permits inspected during EY 2018 include: Elk Horn Coal Company LLC, Permit No. 836-5603; Powell Mountain Energy LLC, Permit No. 848-5517; Premier Elkhorn Coal LLC, Permit No. 867-0529; Red River Coal Company INC, Permit No. 867-5310; Sapphire Coal Company, Permit No. 867-5312; Sapphire Coal Company, Permit No. 867-5314; Landmark Mining Company INC, Permit No. 898-0901; Premier Elkhorn Coal LLC, Permit No. 898-4552; Premier Elkhorn Coal LLC, Permit No. 898-4554, and Premier Elkhorn Coal LLC, Permit No. 898-4557.

As a result of the inspections, a single non-compliance was issued to Permit No. 898-4557 for failure to implement a water monitoring program designed to monitor discharges from the underground mine works. The permittee subsequently withdrew its bond release request. The OSMRE Hydrologist provided recommendations for seven of the bond releases which included verifying mine seal plans, investigating barrier thickness between mines, using boreholes to monitor mine pool elevations, and investigating artesian discharges.

In EY 2019, OSMRE will only be evaluating the underground mine permits that have applied for bond release and are selected for oversight.

C. General Oversight Topic Reviews

1. Inspection and Enforcement

Federal Oversight Related Inspections

OSMRE's Directive REG-8 provides a formula to calculate the minimum number of OSMRE oversight inspections required in the evaluation of state's with primacy programs. The calculation of the REG-8 mandate for OSMRE's oversight for Kentucky's program identified 307 oversight inspections as the minimum required. In EY 2018, OSMRE conducted a total of 392 oversight-related inspections of which 382 counted directly toward the required REG-8 inspections. The graph below demonstrates the comparison between the minimum REG-8 target inspections and the actual number of inspections conducted.

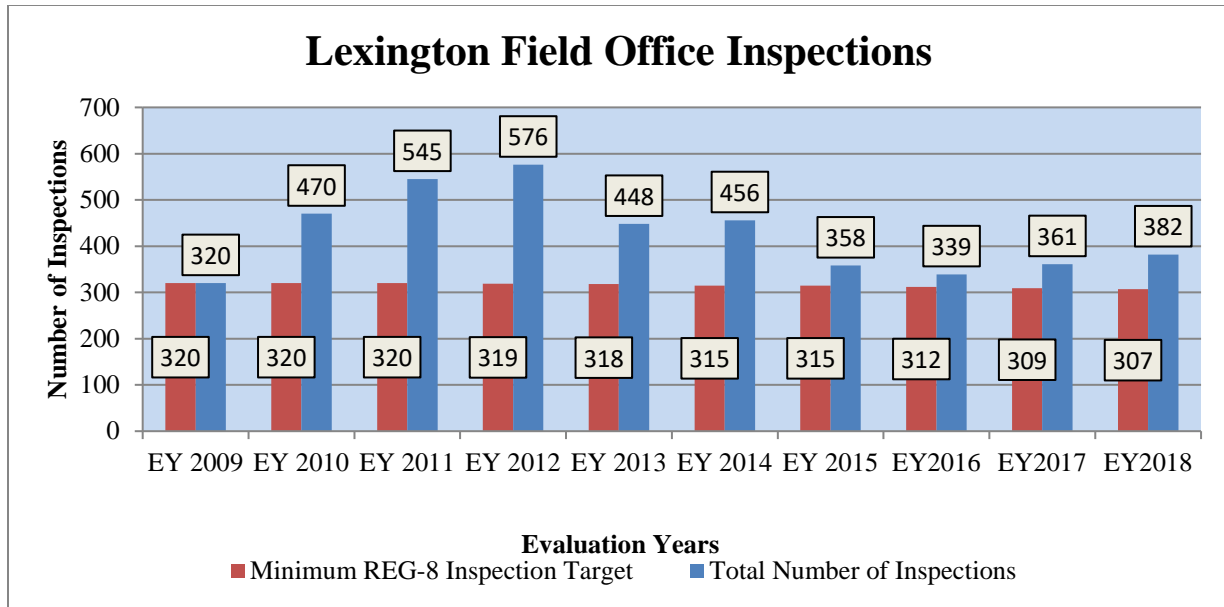


FIGURE 7.—The number of REG-8 minimum oversight inspections compared to the total OSMRE inspections.

Inspection Type	REG-8 Requirement	Number of Inspections	Number of Violations
Oversight Complete (OC)	105	296	413
Oversight Complete Independent (OCI)	30	10	12
Oversight Bond Release Phase III	172	41	3
Oversight Partial (OPO)		9	4
Oversight Bond Forfeiture (OBF)		7	0
Oversight AMD Active Inventory		8	3
Oversight AMD Inventory Deletion		10	2
Oversight Follow-up TDN (OFTDN)		1	0
Citizen Complaint Review (CCR)	N/A	0	0
Technical Assistance (ATECH)	N/A	1	0
Document Review (DR)	N/A	9	4
REG-8 Totals	307	382	437
Total	N/A	392	441

TABLE 4.—A breakdown of the 392 oversight-related inspections conducted by OSMRE. Additional inspections reflected in OSMRE’s total inspections are included at the bottom of the table. The letter codes are OSMRE’s inspection codes used in the Inspection and Enforcement (I&E) database.

The fundamental purpose of oversight is to ensure that regulatory authorities are effectively administering, implementing, maintaining, and enforcing their approved regulatory programs. OSMRE conducts oversight inspections of surface coal mining and reclamation operations as necessary to monitor and evaluate the administration of approved state or tribal programs in accordance with 30 CFR§842.11(a)(1). Permits are selected at random from Kentucky’s inspectable units list and the selected permits are then used by OSMRE to plan joint oversight inspections with KYDNR. Random inspections are comprised of “oversight complete inspections”, and “oversight complete independent inspections”. During EY 2018, 296 comprehensive random inspections, 10 comprehensive independent random sample inspections, and 9 partial inspections were conducted. All 315 inspections were selected from the list of active and Phase I bond released permits for surface and underground coal mining operations. The other inspections that contribute to the REG-8 mandate include “oversight bond forfeiture”, “oversight long-term treatment active inventory”, and “oversight long-term treatment inventory deletion”. The OSMRE tracks the compliance data observed during oversight inspections. The following table shows violation data collected during REG-8 inspections.

Inspections Type	Deferred	Previously	Abated	TDN	Total
Oversight Complete (OC)	193	210	6	4	413
Oversight Complete Independent (OCI)	6	4	0	2	12
Oversight Partial (OPO)	0	4	0	0	4
Oversight Bond Release Phase III (OBR3)	2	0	1	0	3
Oversight AMD Inventory Deletion	2	0	0	0	2
Oversight AMD Active Inventory	2	1	0	0	3
Totals	205	219	7	6	437

TABLE 5.—Violation data collected during REG-8 inspections.

The OSMRE observed 437 violations during oversight inspections, 47 percent of which were cited during oversight inspections. Previously cited violations accounted for 50 percent of the observed violations. The OSMRE issued TDNs on six violations during two inspections occurring during the EY. The six performance standards cited were General Hydrologic Requirements (2), Water Monitoring (2), Permit conditions (1), and Sedimentation Ponds (1). The OSMRE is currently reviewing the appropriateness of the state action taken. The five most often cited performance standards for the 437 violations observed during EY 2018 oversight inspections were: Siltation structures, Stabilization (rills and gullies), Contemporaneous Reclamation, terms and conditions of the permit, and mining within a valid permit.

Comprehensive random inspections conducted by OSMRE are also used to measure industry compliance. A percent of permits with no observed violations is determined by taking the number of comprehensive random inspections with no observed violations divided by the total number of comprehensive random inspections. The OSMRE conducted 315 random inspections

and observed violations on 135 inspections. The percent of permits with no observed violations during EY 2018 was 57 percent and was the lowest it has been in the past 10-year period (see Figure 8).

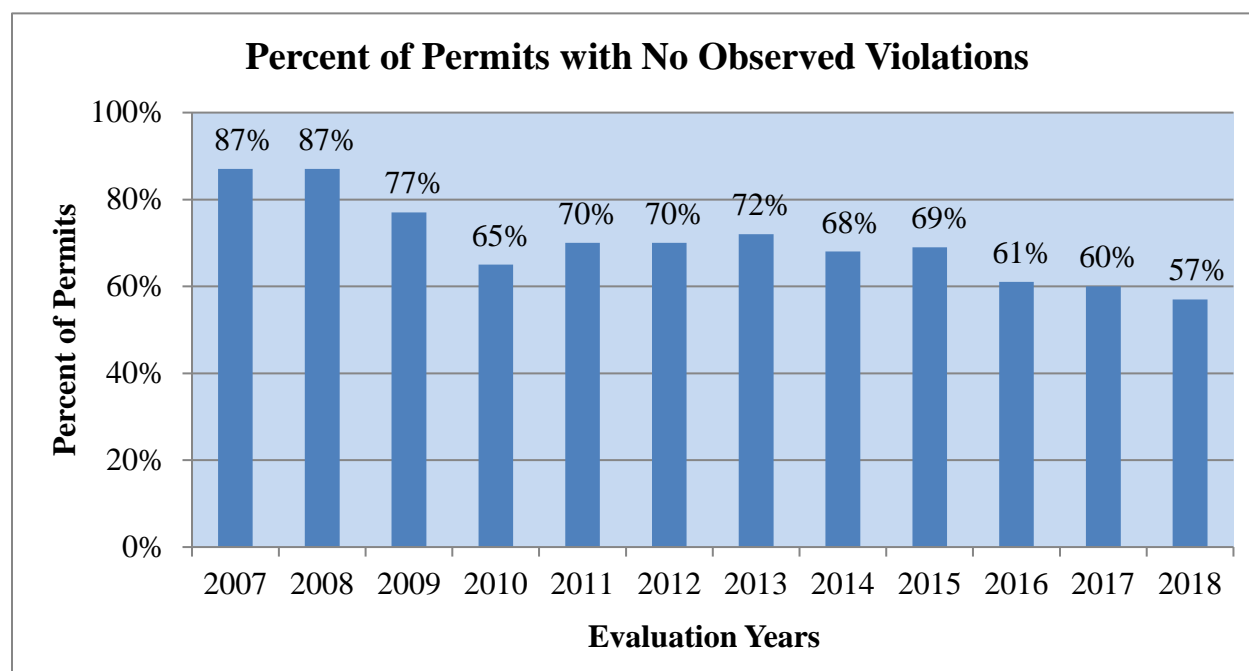


FIGURE 8.—Bar Graph showing the industry compliance over the past 10 years expressed as a percent of permits with no observed violations.

State Regulatory Authority Inspections

As represented in Table 6 below, during EY 2018, KYDNR completed a total of 6,315 complete inspections and 10,488 partial inspections. KYDNR is required by 405 KAR 12:010, Section 3(5) to conduct one complete, and two partial inspections per calendar quarter on all active mine sites. Inactive and abandoned/forfeited mine sites require one complete inspection per quarter. Inactive mine sites are those that have received a Phase I bond release and meet the requirements listed in 405 KAR 12:010, Section 3(5) or are in temporary cessation.

Coal Mines and Facilities	Number of Complete Inspections	Number of Partial Inspections
Active	6,081	10,382
Inactive	204	85
Abandoned	30	21
Total	6,315	10,488

TABLE 6.—Breakdown of inspection statistics for active, inactive, and abandoned sites.

OSMRE tracked inspection frequency throughout EY 2018 and reported the overall frequency on an annual basis. The KYDNR met the required inspection frequency on 100 percent of the permits requiring inspections.

Number of Permits Requiring Inspection	1,471
Number of Inspections Conducted	16,803
Number of Permits Meeting Frequency	1,464
Percentage of Permits Meeting Frequency	100%

TABLE 7. —Summary of the data used to calculate inspection frequency.

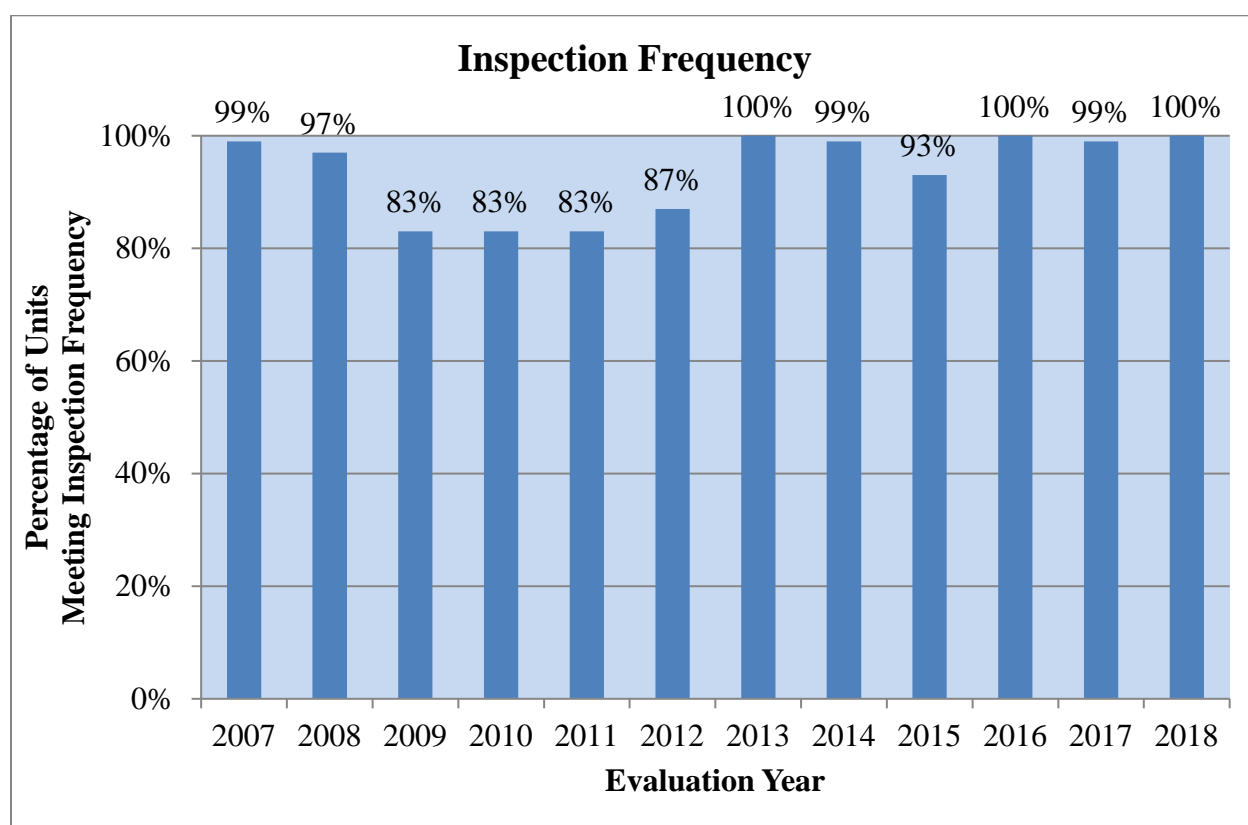


FIGURE 9. —Inspection frequency since EY 2007.

During EY 2018, KYDNR issued 748 NNCs. These NNCs resulted in 1,341 violations of performance standards. This is a slight decrease in enforcement actions from EY 2017, but a slight increase in the number of performance standards that were violated. During EY 2017, KYDNR issued 796 NNCs with 1,335 violations of performance standards. A complete listing of non-compliance data (listed alphabetically, by company name) issued by KYDNR is located in Appendix XIV.

Performance Standards Cited During EY 2018					
Performance Standard	Total Amount	Total by Percentage (Approx.)	Performance Standard	Total Amount	Total by Percentage (Approx.)
Water Monitoring (WM)	175	13.0%	Disposal of Coal Processing Waste (DC)	13	1.0%
Sedimentation Ponds (SC)	160	11.9%	Coal Waste Dam(WD)	12	0.9%
Water Quality (WQ)	135	10.1%	Blasting (UE)	10	0.7%
Off Permit Disturbance (OD)	114	8.5%	Signs & Markers (SM)	10	0.7%
Backfilling and Grading (BG)	106	7.9%	Disposal of Non-Coal Waste (DW)	9	0.7%
Roads (AC)	75	5.6%	Ownership & Control (OC)	8	0.6%
Effluent Limitations (EL)	67	5.0%	Topsoil (TH)	7	0.5%
Diversions (DV)	64	4.8%	Drilled Holes (DH)	6	0.4%
Disposal of Excess Spoil (DS)	61	4.5%	Liability Insurance (LI)	5	0.4%
Contemporaneous Reclamation (CR)	59	4.4%	Subsidence (SB)	5	0.4%
General Hydrologic (HR)	51	3.8%	Auger Mining (AM)	3	0.2%
Impoundments (IM)	51	3.8%	Air Resources Protection (AP)	3	0.2%
Other Permit Conditions (OT)	51	3.8%	Approved Operator (UO)	3	0.2%
Method of Operation (OM)	44	3.3%	Flyrock (FR)	1	0.1%
Revegetation (RV)	18	1.3%	Mining Off Permit U/G (OO)	1	0.1%
Steep Slope (SS)	13	1.0%	Post-Mining Land Use (PL)	1	0.1%

TABLE 8. — Performance Standards cited during EY 2018.

2. Blasting – Adverse Effects

The most serious adverse effect resulting from blasting is flyrock. KYDNR and OSMRE continued to stress the importance of reducing the number of flyrocks and one confirmed flyrock event occurred during EY 2018. This event was discovered on a random complete oversight inspection, on permit 867-0541 Raven Energy Inc., and the event had not been reported by the permittee to the KYDNR.

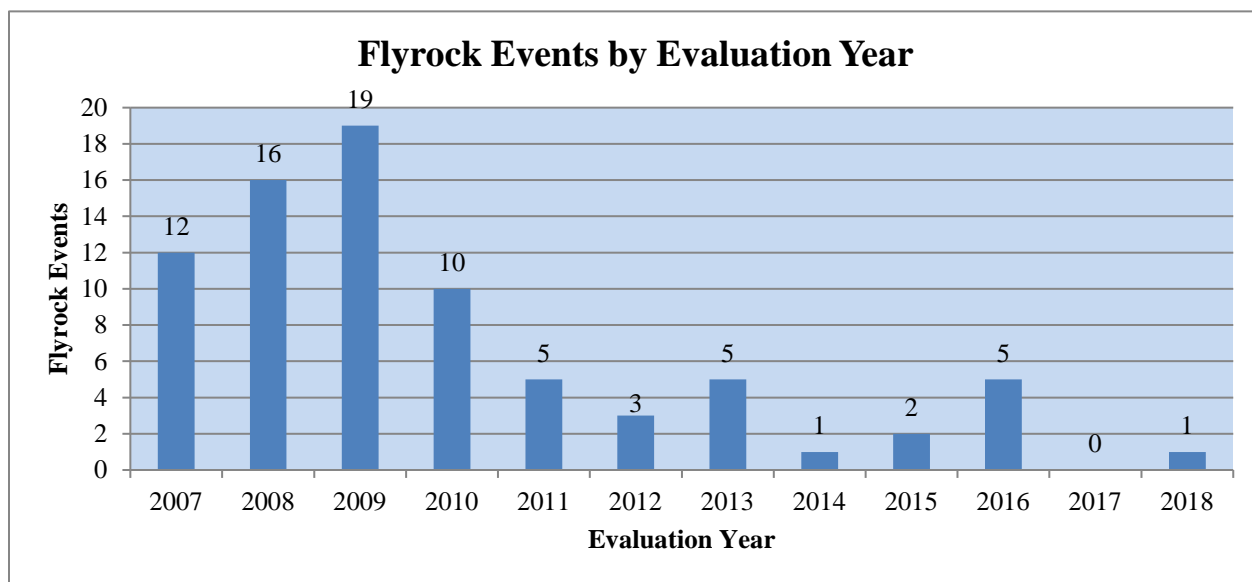


FIGURE 10.—the chart shows the reduced trend of confirmed flyrock events that have occurred during the listed EY's since EY 2007.

3. Bond Forfeiture Report

The Draft *Permanent Program Bond Forfeitures Report* is a study conducted by OSMRE to assess whether the reclamation performance bond amounts being set were adequate for the regulatory authority to complete reclamation in the event of forfeiture. Bond forfeitures have been evaluated on an annual basis since EY 2007. The prior studies identified concerns regarding the adequacy of reclamation bond amounts and supplemental assurances, the lack of financial assurance that non-compliant discharges would be treated, and the timeliness of enforcement/legal actions.

Figure 11 illustrates the number of forfeited permits over the past 10 years. This year's study evaluated the permanent program bond forfeitures that occurred at seven permits during EY 2017.

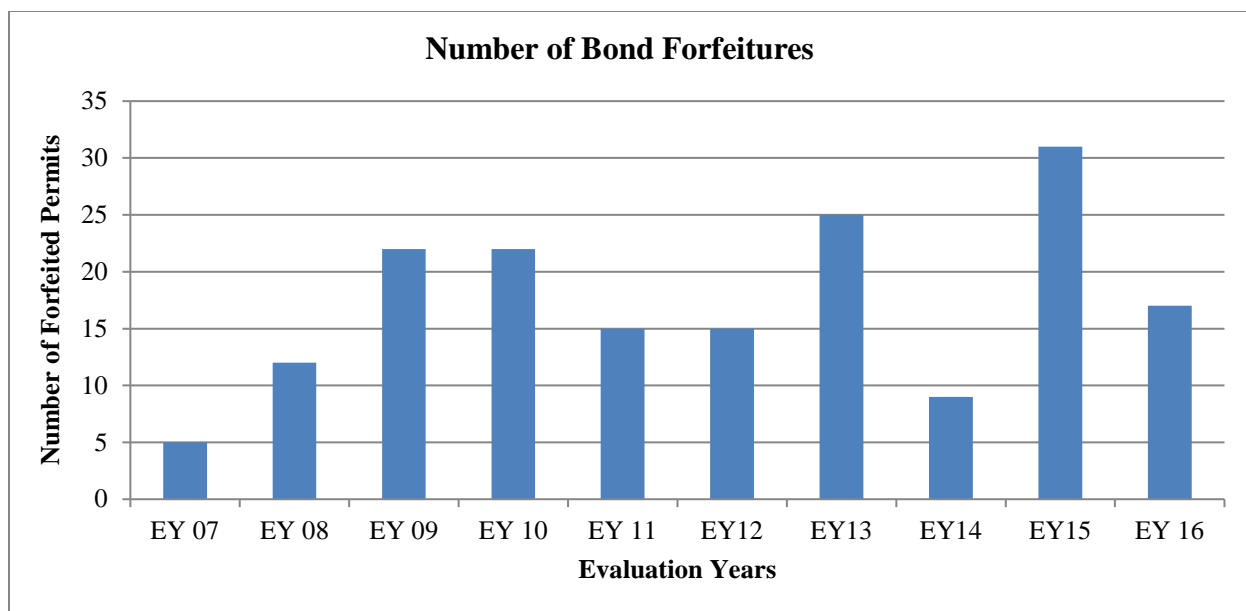


FIGURE 11. —The number of forfeited permits for the last 10 EYs.

The team found that, when evaluating bond adequacy, using the total bond amount posted on a permit against the estimated reclamation cost, four of the seven permits (57.1 percent) did not have sufficient bond to reclaim the permit to permanent program standards. Forfeited increments in EY 2017 were under bonded by an average of \$66,700.23. If you exclude increment two of Xcell Energy and Coal Company 877-0175, on average, the remaining forfeited increments were under-bonded by \$3,530.08. Kentucky Division of Abandoned Mine Land's (KYDAML) cost estimates calculated the cost of reclamation to permanent program standards to be \$5,201,817.70 while the total bond posted for the 33 increments forfeited totaled \$3,000,710, which accounted for 57.7 percent of the total estimated cost of reclamation. The reclamation estimates provided by KYDAML are estimates and may be more or less than the actual cost of reclamation. The approved program in Kentucky uses an alternate bonding system to ensure liabilities are fully covered so the difference in the bond amount posted and the actual cost of reclamation is made up from the Kentucky Reclamation Guaranty Fund.

A National Priority Review Report on bond calculation, completed on January 5, 2011, indicated that the bond computations protocol used at the time did not always yield an adequate bond amount to complete the reclamation work required if the regulatory authority had to perform the work. These findings were substantiated by OSMRE's findings from the studies on bond forfeitures in Kentucky. As a result of these findings, OSMRE initiated, on May 12, 2012, a 30 CFR Part 733 process which requires Kentucky to correct its bonding deficiencies or face a Federal take-over of part or all of Kentucky's surface coal mining program.

KYDNR submitted two program amendments to OSMRE in response to the 733 action: 1) the bonding protocols on September 26, 2012 and, 2) the creation of the Kentucky Reclamation Guaranty Fund (KRGF) on December 4, 2013. These amendments were combined under one Federal Register notice and have been assigned program amendment number KY-256. KY-256 was approved with exceptions on January 29, 2018 and published in the Federal Register (83

Fed. Reg. 3948). OSMRE did not approve an administrative regulation that allows for the posting of a financial performance bond to address water reclamation. OSMRE deferred its decision on approving the bi-annual actuarial review until OSMRE was able to evaluate the stability of the KRGF over its first three full years of implementation. Also, OSMRE did not approve a regulation that, in lieu of providing the bond mentioned above, allowed a permittee to address the water treatment by submitting a land reclamation-based remediation plan. Due to this disapproval of the regulation, OSMRE required Kentucky to (1) notify OSMRE as to how Kentucky will require operators to address financial assurances for the treatment of post-mining discharges under its currently approved program or (2) submit an amendment to its approved program that requires operators to provide sufficient financial assurances for the treatment of such post-mining discharges.

The OSMRE plans to conduct studies that evaluate different aspects of bonding, including monitoring of bond forfeitures. A new study is being developed and incorporated in the EY 2019 and EY 2020 Performance Agreement.

4. Fill Inventory

Since CY 1999, OSMRE and KYDNR have collected information, on a calendar year (CY) basis, for the size and location of excess spoil disposal fills for all new permits, amendments, and major revisions issued. This information includes data on both newly permitted fills, and modifications to permitted fills. OSMRE and KYDNR use the data to do trend analyses for the total number and size of fills permitted from year to year. Figure 13, below, shows the total number of fills with permitting actions since CY 1999.

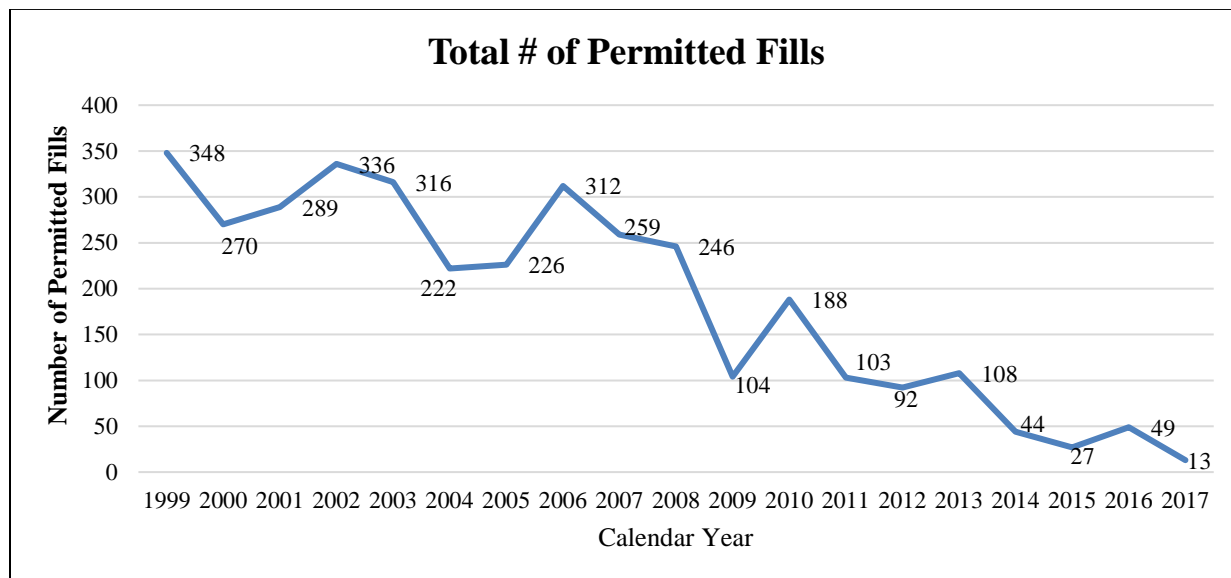


FIGURE 12. —Total number of fills permitted during CY 1999 through 2017.

The KYDNR issued 94 permitting actions (24 new permits, 31 amendments, and 39 major revisions) in CY 2017 involving surface, underground, or other mining operations. The OSMRE

and KYDNR found 10 permitting actions that contained information on 13 fills. The other 84 permitting actions did not involve fills.

5. Long-Term Treatment

The Kentucky Long Term Treatment (LTT) Inventory, maintained by the KYDNR, is a list of permits which require treatment in order to meet Kentucky Pollutant Discharge Elimination System (KPDES) requirements. Discharges from ponds or other sites are added to the inventory as field staff identify the need for treatment during inspections. The inventory includes two sections, active and historical. The active inventory includes all discharge sites which currently require treatment. The historic inventory includes discharge sites that were removed from the active inventory because treatment was no longer necessary. The KYDNR policy entitled “Procedure for the Identification and Inventory of Long Term Treatment Sites” dated May 6, 2013, describes KYDNR’s definition of treatment, as well as when a discharge site is eligible to transition from the active to historical inventory. Once a discharge site is added to the active inventory, the permittee is notified that a permit revision is necessary to identify the location and type of treatment. The revision must either demonstrate that the noncompliant discharge will be remediated through land reclamation, or provide an estimated annual treatment cost. Currently, if annual costs are provided, KYDNR calculates a bond (LTT bond) in the amount of twenty times the annual cost of treatment plus any set-up costs. During EY 2018, seven discharge sites, from six permits, were added to the LTT active inventory.

As part of the performance agreement, KYDNR notifies OSMRE when a discharge site is eligible to transition from the active to historical inventory. The OSMRE performs joint field inspections of these permits to catalog the conditions at each discharge site. The OSMRE performed Oversight Mine Drainage Deleted Site (OMDDS) inspections on 10 permits during EY 2018. In total, 20 discharge sites were evaluated in order to determine if they were eligible to transition from the active to historical LTT inventory. Of the 20 discharge sites evaluated, OSMRE and KYDNR determined that 3 sites were ineligible for the transition. The only non-compliances issued as a result of the OMDDS inspections were at Liberty Management LLC, Permit No. 860-0563. During the inspection of Permit No. 860-0563, two of the structures being inspected to transition from the active to historical LTT inventory were found to have unapproved discharge structures. Chemical treatment tanks were still present at one of the ponds, and the other was found to be discharging water that did not meet KPDES requirements.

During EY 2018, KYDNR transitioned ten permits and twenty discharge sites from the active to historical Inventory. Three additional discharge sites were removed from the active inventory due to bond forfeitures. Permit No. 864-0182 forfeited two LTT sites, Pond 1 and Pond 5. When calculating the LTT bond for Permit No. 864-0182, DMP determined that a \$96,800 bond would be necessary to treat water at Pond 5 for the 20 year time period. The \$96,800 was to be posted in four installments and the permittee submitted the first installment, but did not post additional bond prior to forfeiture. There was no bond posted for Pond 1. Permit No. 877-0175 forfeited one LTT site, Pond 15 and no bond had been posted for this permit.

The OSMRE also performs joint Oversight Mine Drainage Active Inventory (OMDAI) inspections. During an OMDAI inspection, OSMRE documents the treatment system and performs an investigation of the pond(s) where the treatment is occurring. The inspection also

includes a review of the approved LTT permit documents. The KYDNR inspector, and when available, a permittee representative, are interviewed to determine if changes to the treatment system have occurred over time. The observations made in the field (treatment system configuration, chemicals, number of ponds, use of electricity, etc.) are compared to that described in the approved permit, to determine if the permit adequately described the treatment system. OSMRE conducted 8 OMDAI inspections during EY 2018. Two additional inspections were conducted during July 2018. The permits were randomly chosen from the KYDNR LTT Inventory. The permits in the EY 2018 study include: McCoy Elkhorn Coal LLC, Permit No. 898-4569; Liberty Management LLC, Permit No. 897-8065; Armstrong Coal Company INC, Permit No. 892-8008; Crockett Collieries INC, Permit No. 874-5012; Knott County Coal LLC, Permit No. 860-8028; Revelation Energy LLC, Permit No. 898-0893; Meadow Fork Mining Company LLC, Permit No. 864-0182; Deane Mining LLC, Permit No. 860-5405; Revelation Energy LLC, Permit No. 807-0449 and Middlesboro Mining Operations INC, Permit No. 807-0435.

Five of the 10 permits inspected were found to be in a state of non-compliance. Permit Numbers 898-4569, 860-8028 and 892-8008 were issued non-compliances for failure to meet KPDES water quality standards. The KYDMRE has issued an Order for Cessation and Immediate Compliance to permit No. 874-5012 for repetitively discharging water failing to meet water quality standards. The KYDMRE field personnel stated that the permittee had abandoned treatment activities at this site. Permit No. 864-0182 was removed from the active inventory during the study due to forfeiture, and continues to discharge non-compliant water. The other five permits were found to be discharging water in compliance with water quality standards. The OSMRE is drafting a report which details the inspection activities at each permit, and provides recommendations to improve the inspection and bonding of LTT sites.

VI. The Approved State Program

The Kentucky State Program was conditionally approved in 1982. Since that time the State has submitted 258 amendments to the approved program. Part 732 of 30 CFR provides the regulatory framework for states to maintain the approved program in accordance with SMCRA, through program amendments. Part 733 of 30 CFR allows for the substitution of Federal law in the place of state law. The KYDNR currently has three program amendments pending. The following table describes the active program amendments.

Amendment Number	Description	Status
KY-254-FOR	Statutory changes resulting from the passage of HB 385 during Kentucky's 2011 Legislative Session. The amendments to Kentucky Revised Statutes (KRS) 350.060 require any changes to the bonding protocol currently in use to be promulgated in an administrative regulation. The amendment also requires the formula used to establish the bond amount to be included in the administrative regulation. The administrative regulation will be found deficient if the formula is not included.	Final review under consideration by OSMRE
KY-255-FOR	The State submitted administrative regulations as proposed amendments that are intended to be a cost saving measure regarding electronic notification of enforcement documents required under KRS Chapter 350.	Awaiting the submission of a correction to the amendment by the State
KY-256-FOR	This originally was an interim final rule. The KYDNR is concurring with the Governor's decision to make the bond adequacy effective immediately, based in part to OSMRE's 733 letter issued May 1, 2012. KYDNR also submitted regulations that will go through the normal program amendment process. This amendment has been combined with KY-257 in <u>Federal Register</u> Notice 80 FR 15953, on Thursday, March 26, 2015.	Approved with exceptions 83 Fed. Reg. 3948 (January 29, 2018)
KY-258-FOR	Kentucky seeks to amend the language within its approved program with the intent to clarify what is required for a permit applicant to demonstrate right of entry/right to mine when the proposed operations entail land with severed surface and mineral estates.	Under consideration by OSMRE
KY-259-FOR	Kentucky seeks to revise its program to include statutory changes that remove the requirement to permit the area overlying underground mine works or "shadow area" and amend related public notification requirements. Kentucky also seeks to revise or add administrative regulations that implement the statutory changes, define necessary terms, provide information on how underground permitting would be addressed moving forward, remove the requirement to submit a preliminary application, and update required forms.	Draft Proposed Rule being compiled.

Table 9. —Active program amendments.

VII. Regulatory Program Problems and Issues.

A. 733 Action

In January 2011, OSMRE determined that KYDNR was not requiring adequate bond to be posted to ensure complete reclamation of mine sites. An action plan was developed that assigned a joint OSMRE/KYDNR team to review KYDNR proposals for revising the current bonding protocols to address the adequacy of the reclamation bonds. On January 17, 2012, OSMRE

concluded that, while the proposed bond protocols would result in an improvement as to the adequacy of the reclamation bonds, the projected bond amounts would remain inadequate to complete reclamation. On May 1, 2012, OSMRE initiated the 30 CFR Part 733 process requiring KYDNR to correct the identified bonding deficiencies or have Federal law substituted for part or all of the Kentucky surface mining program.

To correct the identified bonding deficiencies in its program, on May 4, 2012, Kentucky adopted emergency regulations to revise the bonding program and began the review process to change the permanent administrative regulations to match the emergency regulations. On March 22, 2013, Governor Beshear signed House Bill 66, which resulted in statute and regulation changes of KRS 350 and administrative regulations 405 KAR. The bill also established the Kentucky Reclamation Guaranty Fund (KRGF) as a revolving fund, which requires mandatory participation unless the permittee opts for full cost bonding. The purpose of the fund is to cover the excess costs of reclamation for coal mining sites when the permit specific bond is inadequate. A summary of the changes to the bonding program was published in the Federal Register, 80 Fed. Reg. 15953, on Thursday, March 26, 2015. Written comments were accepted until April 27, 2015. There were no requests for a public hearing.

OSMRE deferred its decision on the bi-annual actuarial review provision of HB 66 until OSMRE was able to evaluate the stability of the FRGF over its first 3 full years of implementation. KRGF's actuarial report for FY 2014 and 2015 were completed during EY 2017. These studies assessed the soundness of the fund against bond forfeitures that occurred under the revised protocols and found the fund to be solvent. OSMRE reviewed the actuarial reports for reasonableness and tentatively agreed with the report's findings and projection. KRGF's FY 2016 actuarial report was submitted to OSMRE for review during EY 2018 and OSMRE tentatively agreed with the report's findings.

Kentucky's program amendment KY-256 was approved, with exceptions, on January 29, 2018 and published in the Federal Register (83 Fed. Reg. 3948). OSMRE did not approve the administrative regulation, 405 KAR 10:015 8(7), that allows for the posting of a financial performance bond using a 20 year multiplier to address long-term water treatment obligations for post-mining discharges, potentially in perpetuity. Also, OSMRE did not approve the provision that, in lieu of posting a bond, allows a permittee to address the post-mining discharges by submitting a land-reclamation-based remediation plan.

OSMRE's approval of Kentucky's program amendment requires Kentucky to take one of two actions, within 60 days, to resolve the identified exceptions. The first requires notification to OSMRE on how Kentucky will require financial assurances for the treatment of post mining discharges, potentially in perpetuity, under its current approved program. The second requires submission of a program amendment, or a description of an amendment with a timetable for implementation that requires the financial assurance for the treatment of post-mining discharges for as long as such discharges may exist.

KYDNR elected to submit a program amendment and KYDNR and OSMRE agreed to initiate the pre-submission assistance process. This process is outlined in OSMRE directive STP-1 Processing of Proposed State/Tribal Regulatory Programs and Abandoned Mine Land Reclamation Plans; Amendments; and Part 732 and Part 884 Notifications, Appendix F. The use

of this process will allow both OSMRE and the Commonwealth to work on a mutually agreeable solution to the financial assurance of long term treatment sites. OSMRE and KYDNR are currently working toward approval of the program amendment.

VIII. OSMRE Assistance- Regulatory Program

A. Grants

The annual Administration and Enforcement (A&E) grant, provided by OSMRE, to Kentucky is generally applied for during, and awarded at the end of, the federal fiscal year (October–September), but this award occurs early in Kentucky’s fiscal year, which runs from July 1 to June 30. This creates a situation where, during the EY, one grant is closed out and one grant is awarded. These grants fund 50 percent of the regulatory program, while the State is required to provide the other 50 percent in matching funds. The final 2016 A&E grant awarded Kentucky a total of \$11,632,000, including indirect costs. Kentucky also received \$1,441,801 to administer the Federal Lands Program, which is 100 percent federally-funded. The KYDNR de-obligated \$397,082.74 from the 2016 A&E grant as a result of its inability to match federal funds. The amount awarded by OSMRE for the 2017 A&E grant was \$12,238,470 of which \$1,540,270 was to administer the Federal Lands Program. At the end of the EY 2018, the A&E grant was supporting 180 positions in the regulatory branches of KYDNR.

KYDNR’s mining division, which consists of the Division of Mine Reclamation and Enforcement and the Division of Mine Permits, is 50 percent federally funded. KYDNR continues to be limited by the inability to match the allocated Federal funds with State appropriations, effectively reducing the total funds available to the coal permitting and enforcement programs. In addition, KYDNR has been required to rely on restricted receipts, principally the collection of permit application fees, to make its required match. KYDNR reports that at the end of EY 2018 staffing levels at the Division of Permits were down to 28 permit review and maintenance staff from 30 for the previous year and staffing levels for the Division of Mine Reclamation and Enforcement and Reclamation were 103 inspection related staff which is down from 108 for the previous year. Also, of the inspection related personnel, 59 were inspectors and, with the total number of inspectable units for EY 2018 at 1,471, this provides a general ratio of one field inspector per 25 inspectable units.

B. Training

KYDNR participated in OSMRE’s National Technical Training Program (NTTP) and Technical Innovation and Professional Services (TIPS) training programs which offer regulatory agencies introductory and advanced training classes. During EY 2017, KYDNR had 59 participants in TIPS and 75 participants in NTTP classes. The NTTP classes provided training in the following areas: Coalfield Communications, Forensic Hydrologic Investigations, Erosion and Sediment Control, Subsidence, Passive Treatment, NEPA Procedures, Soils and Revegetation, Wetlands Awareness, Surface and Groundwater Hydrology, Advanced Blasting Investigations and Analysis, Mine Gas Safety and Investigations, Geology and Geochemistry of Acid Forming Materials, Historical and Archaeological Resources, Applied Engineering Principles, AML Design Workshop: Dangerous Highwalls, AML: Landslides, AML: Dangerous Openings and AML: Subsidence. Also, KYDNR continues to utilize both hardware and software provided through TIPS with the GIS and AutoCAD software packages being the most common programs used by KYDNR. During this EY, KYDNR provided four instructors for NTTP courses. These courses included Wetlands Awareness, Permit Findings, SMCRA and the ESA: the 1996

Biological Opinion, Surface and Groundwater Hydrology, AML: Landslides; and Bonding: Administrative and Legal Aspects.

C. Interagency Coordination

The KYDNR and OSMRE meet biannually with other state and Federal agencies (Kentucky Department for Environmental Protection, Kentucky Geological Survey, United States Army Corp of Engineers, United States Environmental Protection Agency, United States Fish and Wildlife Service (USFWS), and the United States Geological Survey) that have a vested interest in SMCRA activities to improve coordination and communication. Also, KYDNR and OSMRE have established working relationships and open dialogues between all agencies involved with the permitting and inspection of mine sites within Kentucky and the region.

1. Clean Water Act

The Clean Water Act Authority in Kentucky is the Division of Water, which issues Kentucky Pollutant Discharge Elimination System Coal Permits. The Kentucky Division of Water and KYDNR work cooperatively to ensure compliance with these permits.

The KYDNR issued 30 Cumulative Hydrologic Impact Assessments (CHIA) during EY 2018. Of the 30 CHIAs, 16 were for new permit applications, 13 for amendments and 1 for a major permit revision. The KYDNR continued trend station monitoring to measure water quality impacts at 177 sites in Hydrologic unit code-12 watersheds. In order to conduct this monitoring, KYDNR is currently matching OSMRE funds using \$240,000 obtained from a litigation settlement. At the end of EY 2018, KYDNR had \$71,000 of the funds available for this monitoring.

2. Endangered Species Act

On September 24, 1996, a Biological Opinion was issued by USFWS to OSMRE regarding surface coal mining and reclamation operations under state and Federal regulatory programs adopted pursuant to Title V of SMCRA where such mining operations “may adversely affect” species listed as threatened or endangered or designated critical habitat under the Endangered Species Act. OSMRE continues to work, in conjunction with USFWS, to ensure that the requirements to protect proposed, threatened, and endangered species and critical habitat are addressed in all of KYDNR’s permitting actions, including exploration operations, initial permit issuance, renewals, and significant revisions.

When a threatened and endangered species is suspected to be present in the area, KYDNR requires that permit applicants either conduct a survey to determine if the species is present at their site or assume the presence of the species and submit a PEP. Surveys or PEPs, all related to bat species, were requested by 15 permit applicants and 5 permit applicants elected to conduct surveys. During EY 2018, KYDNR received 11 Protection and Enhancement Plans (PEPs).

3. National Historic Preservation Act

The National Historic Preservation Act of 1966 provides protection for our nation's historic resources and serves as the basis for the federal government's policy on historic preservation and the National Historic Preservation Program. There are statutes and implementing regulations detailing how a federal agency is to take into account the effects of their actions on historic properties listed in or eligible for listing in the National Register.

The Kentucky Heritage Council is required to "prepare and maintain an inventory or survey of Kentucky's resource of historic buildings, sites, structures, and other landmarks, and list in an official roll those landmarks which possess statewide or national significance". The KYDNR assists in identifying coal mining related activities that may affect historic properties within the State.

During EY 2018, surveys were conducted in four counties. Within the four counties, seven surveys were required and five have been received. The results of these surveys did not identify any historical sites.

4. Federal Lands

In 1998, KYDNR and OSMRE signed a cooperative agreement that gave KYDNR the authority to administer the regulations of coal mining activity on federal lands. OSMRE also provides assistance to other federal agencies in meeting their procedural requirements regarding SMCRA. OSMRE is also responsible for making determinations of valid existing rights for KYDNR for permittees requesting to surface mine on United States Forest Service owned land. There are several Federal agencies which manage land that have, or had, KYDNR coal mine permits including the United States Army Corps of Engineers, the Tennessee Valley Authority, the United States Forest Service, and the Bureau of Land Management. In EY 2018, KYDNR is reviewing one major revision for permit 836-0442, and has received and begun review of one amendment to permit 826-0698 and one minor revision to permit 913-5015, that included Federal lands.

The OSMRE attends and provides input to the subject Federal agency on all phases of bond releases on Federal lands. During EY 2018, OSMRE did not receive any notices of bond release that included Federal lands.

IX. Abandoned Mine Lands Reclamation

A. General: Introduction and Program Administration

The Division of Abandoned Mine Lands (KYDAML) is a division within the KYDNR which administers and implements the Kentucky Abandoned Mine Lands Reclamation Program (AML). The purpose of Kentucky's AML program is to reclaim and restore land and water resources that are adversely affected by pre-SMCRA coal mining activities and that were left with inadequate reclamation. Through reclamation construction projects, Kentucky's AML program works to provide for the protection of property and the public health, safety, and general welfare.

B. Noteworthy Accomplishments

The KYDAML had several noteworthy accomplishments in EY 2018 including the following:

- The KYDAML hosted the National Association of Abandoned Mine Land Programs annual conference in Lexington, KY, September 24-27, 2017. The conference was attended by members of 31 state and Tribal Programs, industry representatives, and others.
- The KYDAML continued to utilize AML Reclamation Economic Development Pilot Program (AML Pilot Program) funding (\$30 million 2016 AML Pilot Program Grant and \$25 million 2017 AML Pilot Program Grant) to spur economic development activity on, or adjacent to, AML sites. Nine projects were chosen for the 2016 funding and 10 projects were chosen for the 2017 funding. During the EY, seven of the nine 2016 project proposals are active, in either the design or construction phase; and five of the ten 2017 project proposals received initial OSMRE approval.
- The KYDAML received official notification that it has been selected to receive a third round of AML Pilot Program funding in the amount of \$25,000,000. KYDAML will submit a grant application for this funding in similar fashion to the first and second rounds of AML Pilot Program funding received in 2016 and 2017. The application period for third-round of project proposal submissions will occur between August 31 and November 16, 2018.
- The KYDAML implemented new technologies to aid AML problem investigation and reclamation processes (design, construction, inspection):
 - Continued the use of unmanned aircraft systems (UAS) (as of the spring 2018, KYDAML was using six UAS). KYDAML currently has five licensed pilots with many staff members interested in becoming licensed and licensing of additional pilots will be as needed. New technologies will be combined with UAS usage, where practical, to maximize the utility of these tools. Such technologies may include FLIR (Forward Looking Infrared Imagery), photogrammetric processing, photogrammetry, geographic information systems, aerial imagery viewers, and mobile apps for flying.
 - Use of tablet computers, which were distributed to KYDAML staff who work in the field, to assist with data collection and reporting from the field. These devices serve as an efficient and comprehensive mechanism for providing background data to personnel in the field.
 - The KYDAML entered into a price contract memorandum of agreement (MOU) to test and possibly implement electrical resistivity geophysical surveys at AML sites to determine the presence or absence of sub-surface (mine) voids. This technology aids in subsidence eligibility determination and subsidence abatement reclamation. This method has the potential to be less expensive, less invasive, and more effective than drilling alone to determine whether or not a site has been undermined and is experiencing, or may experience, underground coal mine subsidence.

- The KYDAML held several employee training sessions on subjects such as reclamation features and design/construction methods, reclamation cost estimation, and investigation techniques. These training sessions were intended to educate KYDAML employees so that funding is expended in the most effective manner.

C. Public Participation and Outreach

Kentucky's AML program provides for remediation of pre-SMCRA coal-mine-related problems at sites that are deemed eligible for AML funding and KYDAML receives a high volume of citizen requests for such assistance. Table 11 provides information as to the citizens and KYDAML's actions in response to such requests (on an annual basis).

Calendar Year	Complaints Received	No. Deemed AML Eligible
2014	722	42
2015	963	32
2016	Approx. 400*	14
2017	479	37
2018	464	47

Table 10. —Complaints received by KYDAML.

* Through August 2016.

Typically, about 10 percent of the investigations that KYDAML pursues are eligible for AML funding. These sites are scrutinized to ensure that the AML mining influence is the predominant cause of the alleged problems. There must also be no party associated with the site that has a continuing reclamation responsibility under state or Federal law.

The KYDAML receives requests at either the field offices or its Frankfort (main) office. Citizens may report AML problems via a phone number available on the KYDAML's website (<http://aml.ky.gov/Pages/AML.aspx>). Occasionally, OSMRE also receives complaints, which are referred to the KYDAML. The field office staff for KYDAML conducts an initial investigation and interviews the complainant, evaluates the problem identified by the landowner, and usually takes samples and photos to document the site. The summary report is then forwarded to KYDAML's Frankfort office for further evaluation.

If the initial investigation concludes past mining might be the cause of the issue addressed in the complaint, the staff at the main office completes a review of all known mining records, including mine maps, old field notes from past reviews, and GIS layers. The KYDAML uses the compiled information to determine if the complaint is AML related. It is often necessary to send out staff

to the site to verify information found during the record review. Some of these reviews can take several days or weeks, depending on the nature and complexity of the problem.

Sites that are deemed eligible are sent to KYDAML design and construction staff for preparation work to design a project that will reclaim the site. The key steps in the process include development of the construction plan and detailed design work for cost estimates, etc. Once the design is complete, the features to be reclaimed are entered into the web-based Abandoned Mine Land Inventory System (e-AMLIS) to document the features, costs and location in the inventory.

D. Summaries of Evaluation Year 2018 Reviews

1. Overall Reclamation Success

The KYDAML submits requests for authorization-to-proceed (ATP) to OSMRE for each construction project. The ATP request consists of documentation demonstrating eligibility, NEPA compliance, and a description of work to be performed. OSMRE reviews the ATP request for NEPA compliance, site eligibility, and appropriateness. When OSMRE finds the project to be compliant, an appropriate authorization is issued to KYDAML, and the project may proceed to construction.

The KYDAML's reclamation projects can be categorized into routine, general, high priority, water supply, or enhancement rule projects. See Figure 13 for a statistical representation of ATPs submitted in this EY. During EY 2018, KYDAML submitted 75 new annual-grant-funded project proposals to OSMRE for ATP approval.

Routine projects typically involve subsidence, mine portal/shaft/auger closures, landslide removal/stabilization, installation of drainage controls, etc. High priority projects usually address similar problems but are designated high priority in instances where there is imminent extreme danger to the public health, safety, and/or general welfare. Fires involving refuse or abandoned mine works are typical high priority projects. Water supply projects involve extending municipal water supplies to residents where ground water has been adversely affected by past coal mining. Enhancement Rule projects involve working with a contractor to re-mine legacy refuse or waste banks in order to reclaim them while extracting marketable coal.

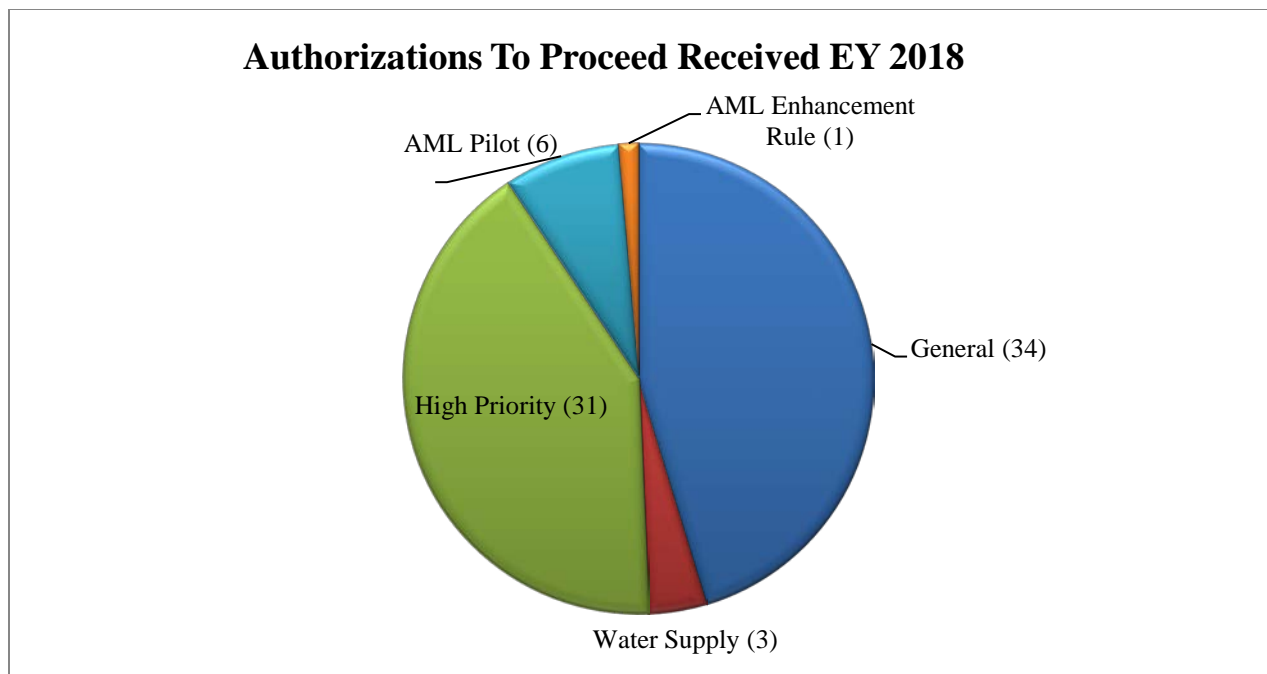


FIGURE 13. —The number and type of projects submitted for authorizations to proceed in EY 2018.

The KYDAML conducts project monitoring through periodic, monthly, and final construction inspections. During EY 2018, the KYDAML used only in-house staff for inspections. These inspections are often conducted jointly with OSMRE AML Program Specialists.

As part of OSMRE’s oversight of the KYDAML’s program, construction project inspections are made by OSMRE personnel. These inspections include a review of documents related to site eligibility, NEPA compliance, design, and construction as well as site visits. The OSMRE inspections are categorized as either pre-authorization, pre-bid, pre-construction, active construction, post construction, final construction, or follow up. In response to a citizen’s request for inspection a citizen’s complaint inspection is conducted.

The OSMRE conducted a total of 255 inspections of KYDAML projects during EY 2018. This included 12 pre-authorization inspections, 47 pre-construction inspections, 125 active construction inspections, 60 final construction inspections, 10 follow-up inspections, and 1 citizen’s complaint inspection.

In the course of OSMRE’s construction project inspections, issues are sometimes identified. These issues usually involve such things as revegetation, construction progress, deviation from approved plans, sediment control installation and maintenance, stability issues, or issues related to NEPA. In instances where issues are identified, OSMRE issues a “concern” to KYDAML. The KYDAML works with OSMRE to resolve these concerns.

This EY, OSMRE identified 27 concerns. A total of 50 concerns were identified in EY 2017. Eighteen of the 27 concerns were deemed to be “major”. The remaining nine were considered “minor”. Major and minor determinations are made in the field by the AML Program Specialist,

and are based on factors such as the nature of the problem, magnitude, and potential environmental impacts.

2. Acid Mine Drainage (AMD)

Prior to FY 2008, KYDAML decided that their AML grant funds were insufficient to take advantage of SMCRA's AMD set-aside program. Also, KYDAML did not request AMD set-aside funds in the FY 2017 or FY 2018 grant applications.

These funds may be used to cover program administration, planning, design, construction, and construction monitoring. The first AMD project in Kentucky was announced in April 2008. In EY 2018, KYDAML completed two AMD projects, one in Union County and one in Hancock County.

3. Water Supply Restoration

KYDAML provides AML funds to install new and/or enhance existing water supply infrastructure that is administered by local city or county municipalities and/or other public water commissions. These projects provide a steady supply of good quality water for municipalities and for private water supplies where water supplies have been impacted by AML-eligible coal mining. Frequently, these projects combine other Federal, state, and local governmental funds to provide public water to a larger area. The other sources of funding allow non-AML-impacted areas to also receive water service.

The AML program funds a portion of the cost of these water replacement projects, based on the mining impacts found in groundwater quality and quantity studies. The funds are most commonly used to install water storage tanks, booster pump stations, and residential water meters. They also allow for the extension or improvement of existing water lines and water facilities serving AML-impacted areas.

In EY 2018, KYDAML submitted three new water supply projects to OSMRE for ATP. During the EY, KYDAML had six total projects under construction and proposed. These projects would install 14 miles of new water line that will provide safe domestic water supplies for approximately 231 residential customers. The combined cost of projects proposed during this evaluation year was \$3,560,000.

4. AML Grant Fiscal and Administrative Reviews

Kentucky's AML program is funded through annual grants administered through OSMRE. The grants come from the Abandoned Mine Reclamation Fund, which is generated through per-ton fees collected from active coal mining. This collection of fees has been authorized by Congress through 2021. Annual reclamation program grants have a three year expiration period. Extensions can be granted beyond the initial grant period when justified. OSMRE did not conduct a review of KYDAML drawdowns and disbursements of the OSMRE grant funding during EY 2018; however, OSMRE reviewed and approved several grant actions through the year which included the review and approval of both the FY 2018 annual grant award and the application for the AML Pilot Program grant.

During this EY, KYDNR submitted an application for the 37th annual grant. The request was for \$19,042,090 for the reclamation program. OSMRE reviewed and approved the grant application prior to the close of the EY. This funding is made available to KYDAML for the period July 01, 2018, through June 30, 2021. In this EY, the reclamation program is operating on funds provided through previous annual grants. At the end of this EY, annual grant funds supported 81 positions.

Also during this evaluation year Kentucky applied for \$25,000,000.00 in AML Pilot Program funds. The application was received, reviewed, and approved during EY 2018 (FY 2017). The grant is intended to stimulate economic activity through development on and adjacent to abandoned mine lands. Use of these funds is subject to oversight by OSMRE and similar to that applied to the annual grants.

Kentucky has implemented the approved action plan which has a schedule for documentation to be provided to OSMRE regarding the grant sub-recipients. This process will include the future AML Pilot Program projects. More information will be provided in the next annual report as the projects are approved for funding and ATP's are completed.

5. Abandoned Mine Land Reclamation Economic Development Pilot Program

The AML Pilot Program grants are to be used for community and economic development on or adjacent to abandoned mine lands. The purpose of projects funded from these grants is to stimulate economic growth. During this evaluation year Kentucky applied and was approved for a \$25,000,000 AML Pilot grant. This is in addition to \$30,000,000 awarded in FY 2016.

The KYDNR receives project proposals from applicants such as municipalities, private organizations, non-profit organizations, etc. The KYDNR selects a limited number of proposals to submit to OSMRE for approval. There were 54 proposals received seeking funding from this year's AML Pilot Program grant, representing approximately \$224,000,000 in requests. Ten proposals were selected for consideration by OSMRE. These 10 proposals are projected to account for the entire FY 2017 grant of \$25,000,000.

OSMRE conducts an initial review of project proposals to evaluate their eligibility and appropriateness. Once preliminarily and conceptually approved OSMRE invites KYDAML to submit a request for authorization to proceed (ATP) with construction activities. The OSMRE reviews and approves AML Pilot projects in a manner similar to the annual grant construction projects.

During this EY, KYDAML submitted ten project proposals to OSMRE for review and conceptual approval. The OSMRE approved 8 of the 10 with the other two under review as of June 30, 2018. The KYDAML submitted ATP requests for six projects and OSMRE has provided ATP's for all six projects. Those projects are in Bell, Clay, Leslie, Johnson, Martin, and Pike counties.

AML Pilot Projects		
	Name	County
1.	Waterline Extension to Future Federal Prison at Roxana	Letcher
2.	Waste Water Treatment Facility for Federal Prison at Roxana	Letcher
3.	EnerBlu Manufacturing Facility Phase I	Pike
4.	City of Pikeville Pack House	Pike
5.	e-Kentucky Advanced Manufacturing Institute – Phase II & III	Johnson
6.	Eastpark Industrial Park Infrastructure and Development	Boyd
7.	Historic Stearns Downtown Revitalization Project	McCreary
8.	Kentucky Mountain Regional Recreation Authority	multiple
9.	Coalfields Industrial Park Gas Supply Project	Perry
10.	Water System Controls and Raw Water Modifications	Martin

TABLE 12.—List of project proposals submitted to OSMRE for review for the AML Pilot Program.

6. Abandoned Mine Land Inventory System (e-AMLIS)

The e-AMLIS is a database used to store, manage, and report information on abandoned mine land problems and is maintained by OSMRE to provide the information necessary to implement SMCRA requirements. The inventory contains information on the location, type, and extent of AML impacts, as well as information on the cost associated with the remediation of those problems. The inventory information for Kentucky is developed and/or updated by KYDAML.

The e-AMLIS addresses only the identified problems eligible for remediation using the Abandoned Mine Land Reclamation Fund. Also, only coal-related problems caused by mining prior to the implementation of SMCRA that meet the first two objectives set out in the law, Priorities 1 and 2, have been systematically inventoried. Priority 1 hazards are those problems that represent an extreme danger to the public health, safety, general welfare, and property. Priority 2 hazards represent protection of public health, safety, and general welfare from adverse effects of coal mining practices. Priority 3 problems represent restoration of land and water resources and the environment previously degraded by adverse effects.

When new AML problems are identified, information on the site conditions and estimated costs for remediation are entered into the e-AMLIS database. Such problems are added to the inventory as “Problem Areas” and may include several AML features. The Problem Area information is also updated between the project proposal and project completion phases. The remediation/reclamation estimate for an identified Problem Area is entered as “unfunded” until the reclamation project is approved via the authorization to proceed (ATP) process. Once

approved, the project budget is changed to “funded” status. Lastly, after the construction is completed and final inspections confirm that the project goals have been met, the budget status is changed to “completed”.

Although the KYDAML has been directly updating the e-AMLIS since the fall of 1995, on July 6, 2004, KYDAML submitted a letter certifying that their process ensures the accuracy of data it places into the e-AMLIS and that this data is used in compliance with OSMRE e-AMLIS guidelines. The e-AMLIS database also allows OSMRE staff to update the database for new sites and/or review proposed entries as soon as they are entered into the inventory by KYDAML.

As time passes for abandoned pre-law underground and surface mines age, new problems can emerge or be discovered. As a result, new Problem Areas are identified each year and, oftentimes, previously identified Problem Areas can worsen. In EY 2018, KYDAML updated or entered 171 new Problem Areas into the e-AMLIS. Current information in the system indicates that there is approximately \$350,000,000 worth of unfunded Priority 1, 2, and adjacent Priority 3 problems in Kentucky and costs, by problem type, may be viewed at <https://amlis.osmre.gov/Summaries.aspx>.

7. Unmanned Aircraft System Review

Kentucky’s AML staff are leading a national collaborative effort with other state programs to increase information sharing, explore new technologies, and develop standard protocols for mapping products produced from UAS sensors and software. Also, Kentucky frequently shares raw images collected from AML sites with OSMRE remote sensing specialists for software testing, best practices, and development of software exercises for TIPS classes.

Kentucky AML has developed a working procedural document for training new pilots, which requires Federal Aviation Administration certification and competency before flying AML sites. The KYDAML has worked with the Kentucky Department of Aviation to make training and certification possible

OSMRE organizes monthly calls for the states to participate and share experiences with UAS systems. TIPS also funded a UAS workshop in which participants from Virginia, West Virginia, New Mexico, Pennsylvania and Kentucky benefited from sharing experiences and hands-on participation. Additionally, OSMRE TIPS funded specialty software training for one OSMRE pilot from the Lexington Field Office and two Kentucky AML pilots this past year.

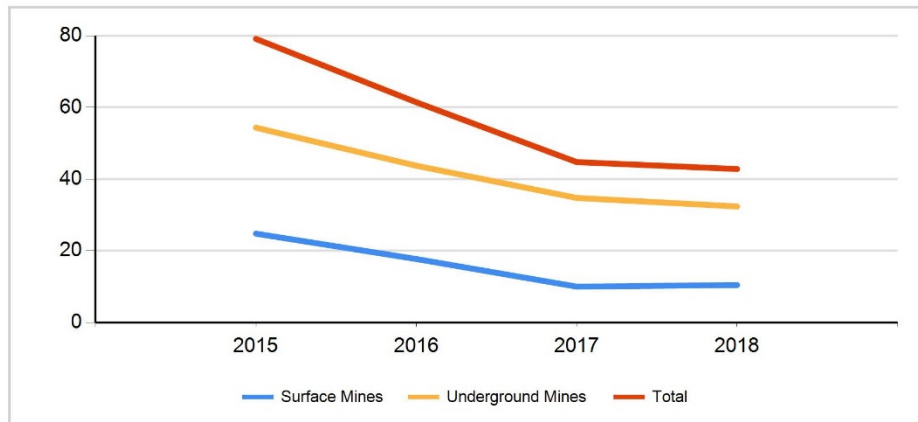
X. Appendix 1 Summary of Core Data to Characterize the Program

TABLE 1

COAL PRODUCED FOR SALE , TRANSFER, OR USE ^A (Millions of short tons)			
Calendar Year	Surface Mines	Underground Mines	Total
2014	24.8	54.4	79.2
2015	17.7	43.7	61.5
2016	10.0	34.8	44.8
2017	10.5	32.4	42.8

^A Coal production is the gross tonnage (short tons) and includes coal produced during the calendar year (CY) for sale, transfer or use. The coal produced in each CY quarter is reported by each mining company to OSM during the following quarter on line 8(a) of form OSM-1, "Coal Reclamation Fee Report." Gross tonnage does not provide for a moisture reduction. OSM verifies tonnage reported through routine auditing of mining companies. This production may vary from that reported by other sources due to varying methods of determining and reporting coal production.

TABLE 1
COAL PRODUCED FOR SALE, TRANSFER, OR USE
DURING THE CALENDAR YEAR
(Millions of short tons)



COAL PRODUCED FOR SALE , TRANSFER, OR USE ^A			
(Millions of short tons)			
Calendar Year	Surface Mines	Underground Mines	Total
2014	24.8	54.4	79.2
2015	17.7	43.7	61.5
2016	10.0	34.8	44.8
2017	10.5	32.4	42.8

TABLE 1

^A Coal production is the gross tonnage (short tons) and includes coal produced during the calendar year (CY) for sale, transfer or use. The coal produced in each CY quarter is reported by each mining company to OSM during the following quarter on line 8(a) of form OSM-1, "Coal Reclamation Fee Report." Gross tonnage does not provide for a moisture reduction. OSM verifies tonnage reported through routine auditing of mining companies. This production may vary from that reported by other sources due to varying methods of determining and reporting coal production.

TABLE 2

PERMANENT PROGRAM PERMITS, INITIAL PROGRAM SITES, INSPECTABLE UNITS, AND EXPLORATION																	
Mines and Other Facilities	Numbers of Permanent Program Permits and Initial Program Sites									Insp. Units ¹ :	Area in Acres ²				Total Area		
	Permanent Program Permits				Initial Program Sites						Permanent Program Permits (Permit Area)	Initial Program Sites					
	Active	Inactive	Abandoned	Total	Active	Inactive	Abandoned	Total	Federal Lands			State/ Tribal and Private Lands	Federal Lands	State/ Tribal and Private Lands			
Surface Mines	610	40	3	653	0	0	0	0	653	5,901	435,918	0	0	441,819			
Underground Mines	498	9	1	508	0	0	2	2	510	83,052	1,136,826	0	9	1,219,887			
Other Facilities	303	3	2	308	0	0	0	0	308	1,010	57,245	0	0	58,255			
Total	1,411	52	6	1,469	0	0	2	2	1,471	89,963	1,629,989	0	9	1,719,961			
Permanent Program Permits and Initial Program Sites (Number on Federal Lands: 0)				Total Number:				1,471				Average Acres per Site:				1,169.25	
Average Number of Permanent Program Permits and Initial Program Sites per Inspectable Unit (IU):				Total Number:				1.00				Average Acres per IU:				1,169.25	
Permanent Program Permits in Temporary Cessation:				Total Number:				178				Number More than 3 Years:				70	
EXPLORATION SITES				Total Number of Sites				Sites on Federal Lands ⁴				Exploration Inspectable Units					
Exploration Sites with Permits:				1				0				0					
Exploration Sites with Notices:				197				0				0					
¹ An Inspectable Unit may include multiple small and neighboring Permanent Program Permits or Initial Program Sites that have been grouped together as one Inspectable Unit, or conversely, an Inspectable Unit may be one of multiple Inspectable Units within a Permanent Program Permit.																	
² Total Inspectable Units calculation includes Exploration Sites Inspectable Units																	
³ When a Permanent Program Permit or Initial Program Site contains both Federal and State and Private lands, the acreage for each type of land is in the applicable column.																	
⁴ The number of Exploration Sites on Federal lands includes sites with exploration permits or notices any part of which is regulated by the state under a cooperative agreement or by OSM pursuant to the Federal Lands Program, but excludes exploration sites that are regulated by the Bureau of Land Management																	

CHART 2A HISTORICAL TRENDS
NUMBER OF INITIAL PROGRAM SITES AND PERMANENT PROGRAM PERMITS

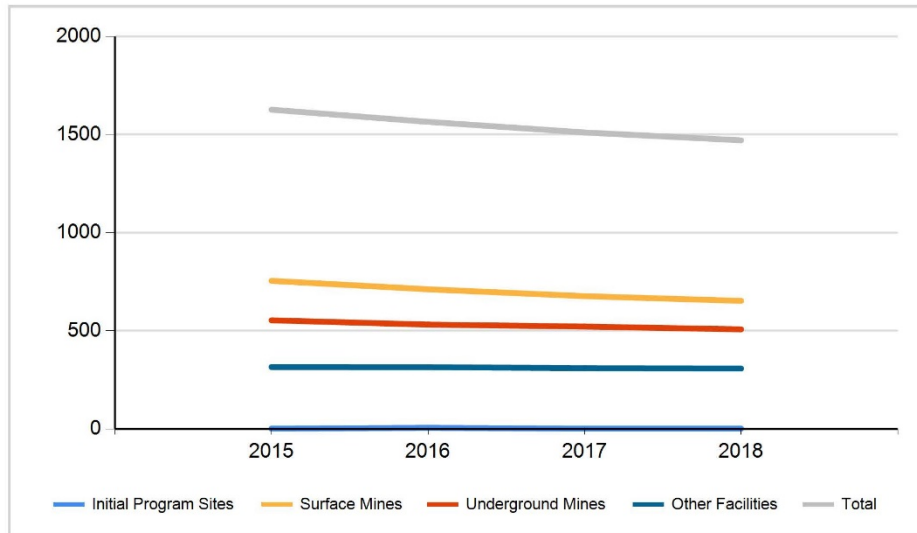


TABLE 2A

NUMBER OF INITIAL PROGRAM SITES AND PERMANENT PROGRAM PERMITS					
Year	Initial Program Sites	Permanent Program Permits			Total
		Surface Mines	Underground Mines	Other Facilities	
2015	2	755	554	316	1627
2016	6	712	532	315	1565
2017	2	677	522	310	1511
2018	2	653	508	308	1471

CHART 2B HISTORICAL TRENDS
AREA OF INITIAL PROGRAM SITES AND PERMANENT PROGRAM PERMITS

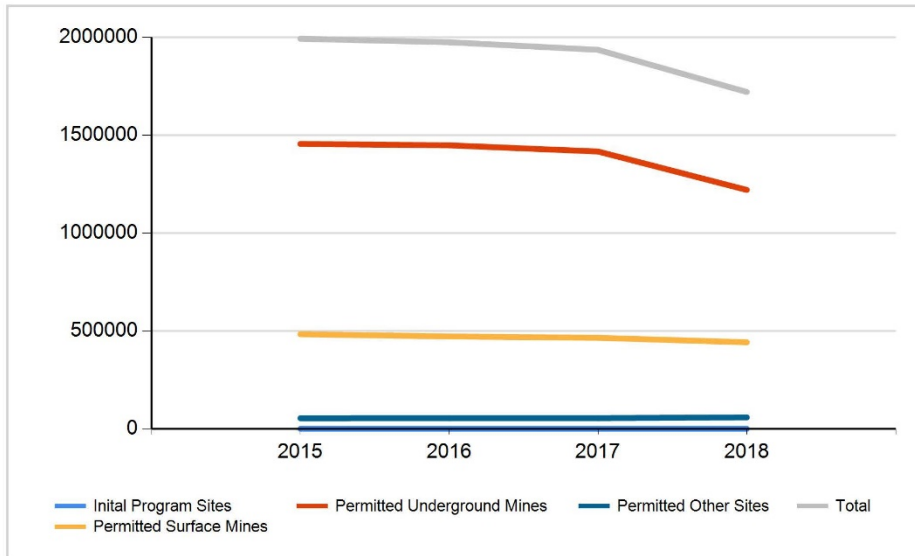


TABLE 2B

AREA OF INITIAL PROGRAM SITES AND PERMANENT PROGRAM PERMITS					
Year	Initial Program Sites	Permanent Program Permits			Total
		Surface Mines	Underground Mines	Other Facilities	
2015	9.0	482989.0	1454815.0	54092.0	1991905.0
2016	9.0	471798.0	1447839.0	54580.0	1974226.0
2017	10.0	464753.0	1416248.0	54448.0	1935459.0
2018	9.0	441819.0	1219878.0	58255.0	1719961.0

TABLE 3

PERMITS ALLOWING SPECIAL CATEGORIES OF MINING			
Special Category of Mining	30 CFR Citation Defining Permits Allowing Special Mining Practices	Numbers of Permits	
		Issued During EY	Total Active and Inactive Permits
Experimental Practice	785.13(d)	0	4
Mountaintop Removal Mining	785.14(c)(5)	0	25
Steep Slope Mining	785.15(c)	0	88
AOC Variances for Steep Slope Mining	785.16(b)(2)	0	76
Prime Farmlands Historically Used for Cropland	785.17(e)	0	69
Contemporaneous Reclamation Variances	785.18(c)(9)	0	118
Mining on or Adjacent to Alluvial Valley Floors	785.19(e)(2)	0	0
Auger Mining	785.20(c)	0	553
Coal Preparation Plants Not Located at a Mine Site	785.21(c)	0	145
In-Situ Processing	785.22(c)	0	0
Remining	773.15(m) and 785.25	0	273
Activities in or Within 100 Feet of a Perennial or Intermittent Stream	780.28(d) and/or (e) 784.28(d) and/or (e)	0	0

**CHART 3A HISTORICAL TRENDS
PERMITS ALLOWING SPECIAL CATEGORIES OF MINING**

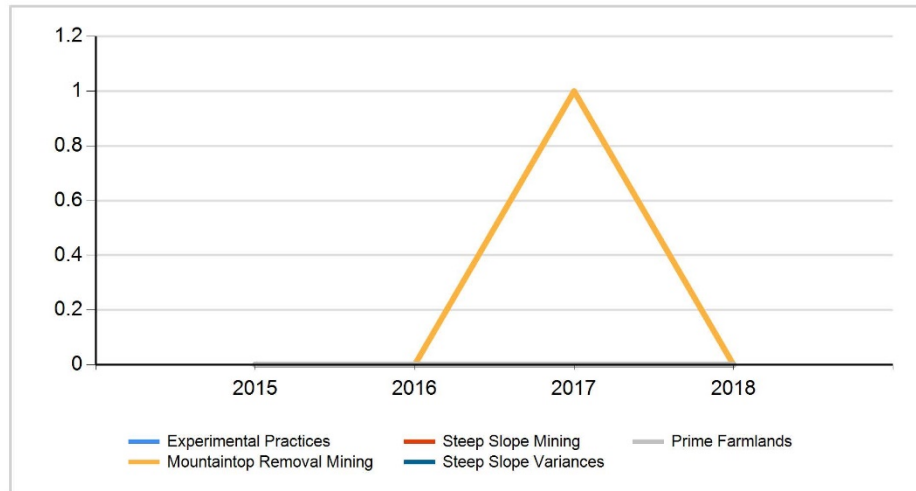


TABLE 3A

NUMBER OF PERMITS ISSUED AND REVISIONS APPROVED					
Year	Experimental Practices	Mountaintop Removal Mining	Steep Slope Mining	Steep Slope Variances	Prime Farmlands
2015	0	0	0	0	0
2016	0	0	0	0	0
2017	0	1	0	0	0
2018	0	0	0	0	0

**CHART 3B HISTORICAL TRENDS
PERMITS ALLOWING SPECIAL CATEGORIES OF MINING**

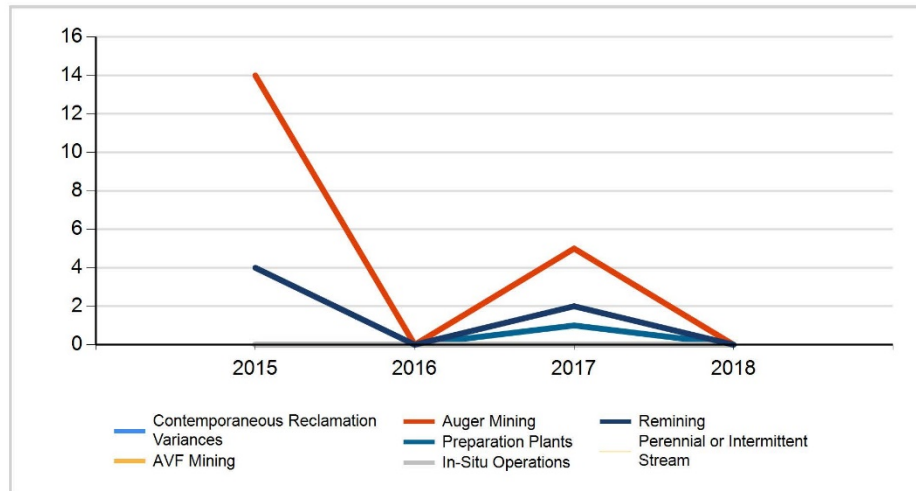


TABLE 3B

NUMBER OF PERMITS ISSUED AND REVISIONS APPROVED							
Year	Contemporaneous Reclamation Variances	AVF Mining	Auger Mining	Preparation Plants Not at Mine Site	In-Situ Operations	Remining	Perennial/ Intermittent Streams
2015	0	0	14	0	0	4	0
2016	0	0	0	0	0	0	0
2017	0	0	5	1	0	2	0
2018	0	0	0	0	0	0	0

TABLE 4

PERMITTING ACTIVITY												
Type of Application	Surface Mines			Underground Mines			Other Facilities			Totals		
	App. Rec.	Issued/ Appvd	Acres	App. Rec.	Issued/ Appvd	Acres ¹	App. Rec.	Issued/ Appvd	Acres	App. Rec.	Issued/ Appvd	Acres
New Permits	10	19	6,647	4	1	0	6	3	2,877	20	23	9,524
Renewals	74	56		54	52		36	32		164	140	
Transfers, sales, and assignments of permit rights	53	29		94	104		93	37		240	170	
Small operator assistance	0	0		0	0		0	0		0	0	
Exploration permits										1	1	
Exploration notices ²											57	
Revisions that do not add acreage to the permit area	33	42		16	38		3	3		52	83	
Revisions that add acreage to the permit area but are not incidental boundary revisions	37	27	1,336	18	21	12,880	8	7	1,721	63	55	15,937
Incidental boundary revisions	147	79	284	96	37	1,153	43	30	42	286	146	1,479
Totals	354	252	8,267	282	253	14,033	189	112	4,640	826	675	26,940
Permits terminated for failure to initiate operations:									Number:	0	Acres:	0.0
Acres of Phase III bond releases (Areas no longer considered to be disturbed):											Acres:	9,430.0
Permits in temporary cessation							Notices received:		175	Terminations:		36
Midterm permit reviews completed							Number:		337			
¹ Includes only the number of acres of proposed surface disturbance												
² State approval not required. Involves removal of less than 250 tons of coal and does not affect lands designated unsuitable for mining.												

**CHART 4A HISTORICAL TRENDS
NEW PERMITS ISSUED**

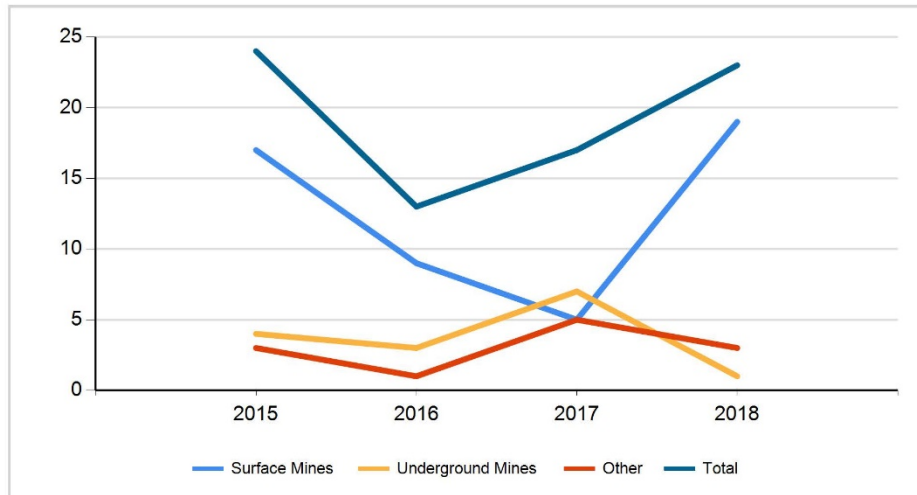


TABLE 4A

NEW PERMITS ISSUED				
Year	Surface Mines	Underground Mines	Other	Total
2015	17	4	3	24
2016	9	3	1	13
2017	5	7	5	17
2018	19	1	3	23

**CHART 4B HISTORICAL TRENDS
NEW ACREAGE PERMITTED**

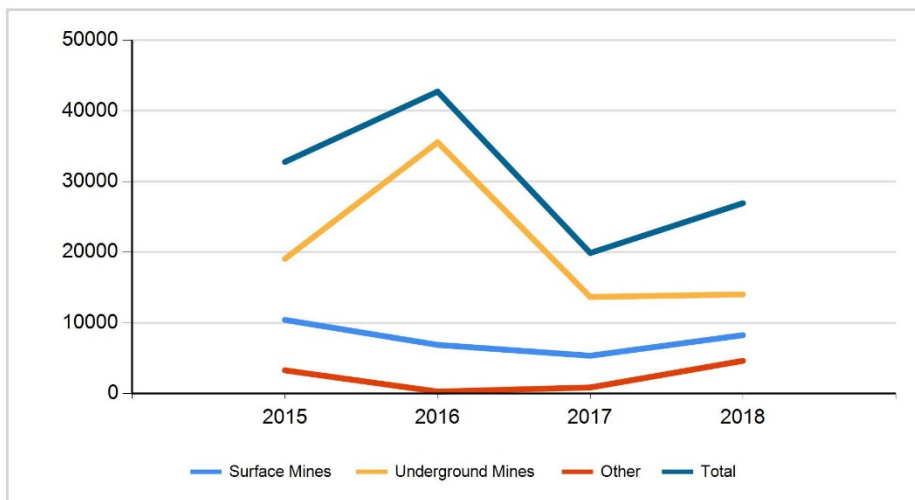


TABLE 4B

NEW ACREAGE PERMITTED				
Year	Surface Mines	Underground Mines	Other	Total
2015	10422.0	19065.0	3287.0	32774.0
2016	6889.0	35557.0	277.0	42723.0
2017	5358.0	13666.0	863.0	19887.0
2018	8267.0	14033.0	4640.0	26940.0

TABLE 5

OFF-SITE IMPACTS EXCLUDING BOND FORFEITURE SITES													
RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	2	0	0	0	2	0	0	0	0	0	0	0	0
Land Stability	76	0	0	0	66	1	0	7	0	0	1	1	0
Hydrology	98	0	0	1	9	0	0	80	0	2	3	2	1
Encroachment	63	0	0	1	42	13	7	0	0	0	0	0	0
Other	4	0	0	0	3	0	0	0	0	0	1	0	0
Total	243	0	0	2	122	14	7	87	0	2	5	3	1
Total Number of Inspectable Units ¹ :				1404									
Inspectable Units with one or more off-site impacts:				165									
Exploration Inspectable Units with one or more off-site impacts ² :				0									
Inspectable Units free of off-site impacts:				1239				% of Inspectable Units free of off-site impacts ⁴ :				88	
¹ Total number of Inspectable Units is (1) the number of active and inactive inspectable units at the end of the Evaluation Year and (2) the number of Inspectable Units that were final bond released or removed during the Evaluation Year													
² Exploration Inspectable Units with one or more off-site impacts is a subset of Inspectable Units with one or more off-site impacts													
OFF-SITE IMPACTS AT BOND FORFEITURE SITES													
RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Stability	102	0	0	0	37	19	46	0	0	0	0	0	0
Hydrology	0	0	0	0	0	0	0	0	0	0	0	0	0
Encroachment	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	102	0	0	0	37	19	46	0	0	0	0	0	0
Total Number of Inspectable Units ³ :				118									
Inspectable Units with one or more off-site impacts:				102									
Inspectable Units free of off-site impacts:				16				% of Inspectable Units free of off-site impacts ⁴ :				14	
³ Total number of Inspectable Units is (1) the number of bond forfeiture sites that were reclaimed during the Evaluation Year and (2) the number of bond forfeiture sites that were unreclaimed at the end of the Evaluation Year													

TABLE 5
(Continued)

TOTAL OFF-SITE IMPACTS INCLUDING BOND FORFEITURE SITES													
RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	2	0	0	0	2	0	0	0	0	0	0	0	0
Land Stability	178	0	0	0	103	20	46	7	0	0	1	1	0
Hydrology	98	0	0	1	9	0	0	80	0	2	3	2	1
Encroachment	63	0	0	1	42	13	7	0	0	0	0	0	0
Other	4	0	0	0	3	0	0	0	0	0	1	0	0
Total	345	0	0	2	159	33	53	87	0	2	5	3	1
Total Number of Inspectable Units ⁴ :				1522									
Inspectable Units with one or more off-site impacts:				267									
Exploration Inspectable Units with one or more off-site impacts				0									
Inspectable Units free of off-site impacts:				1255				% of Inspectable Units free of off-site impacts ⁴ :				82	
⁴ % of Inspectable Units free of off-site impacts is based on the number of Inspectable Units during the Evaluation Year. The number of Inspectable Units may vary during the Evaluation Year.													
⁵ Total number of Inspectable Units is (1) the number of active and inactive Inspectable Units at the end of the Evaluation Year and (2) the number of Inspectable Units that were final bond released or removed during the Evaluation Year and (3) the number bond forfeiture sites that were reclaimed during the Evaluation Year and (4) the number of bond forfeiture sites that were unreclaimed at the end of the Evaluation Year.													

**CHART 5A HISTORICAL TRENDS
PERCENT OF INSPECTABLE UNITS FREE OF OFF-SITE
IMPACTS**

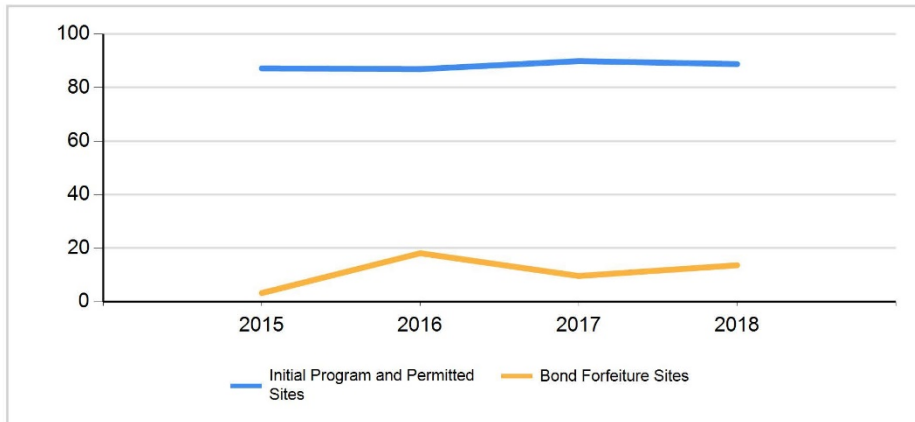


TABLE 5A

PERCENT OF INSPECTABLE UNITS FREE OF OFF-SITE IMPACTS		
Year	Initial Program and Permanent Program Permits	Bond Forfeiture Sites
2015	87.1	3.2
2016	86.5	18.1
2017	89.6	9.6
2018	88.2	13.6

TABLE 6

SURFACE COAL MINING AND RECLAMATION ACTIVITY							
Areas of Phase I, II, and III Bond Releases During the Evaluation Year (EY)							
Phase I Releases	Phase II Releases		Phase III Releases			Total Acres Released During the EY	
Total Acres Released in Approved Phase I Releases	Total Acres Released in Approved Phase II Releases	Acres not previously released under Phase I	Total Acres Released in Approved Phase III Releases	Acres not previously released under Phase II	Acres not previously released under Phase I or II		
8,195		683			1,489	Phase I	10,367
	7,192			3,039		Phase II	10,231
			9,430			Phase III	9,430
Number of Permanent Program Permits with Jurisdiction Terminated Under Phase III Bond Release During the Evaluation Year					49	Other Releases - Acres	
Initial Program Sites with Jurisdiction Terminated During the Evaluation Year					0	Administrative Adjustments	9694
Number of Inspectable Units Removed					40	Bond Forfeiture	455
Areas of Permits Bonded for Disturbance by Surface Coal Mining and Reclamation Operations							
					Total Acres at Start of EY	Total Acres at End of EY	Change in Acres During EY
New Area Bonded for Disturbance							4,835
Total Area Bonded for Disturbance					228,580	213,552	(15,028)
Area Bonded for Disturbance without Phase I Bond Release					207,525	196,975	(10,550)
Area Bonded for Disturbance for which Phase I Bond Release Has Been Approved					33,271	35,922	2,651
Area Bonded for Disturbance for which Phase II Bond Release Has Been Approved					8,802	10,858	2,056
Area Bonded for Disturbance with Bonds Forfeited During Evaluation Year							739
Area Bonded for Remining					0	0	0
Areas of Permits Disturbed by Surface Coal Mining and Reclamation Operations							
Disturbed Area					221,061	224,119	3,058

**CHART 6A HISTORICAL TRENDS
ACRES OF PHASE I, II, AND III BOND RELEASES**

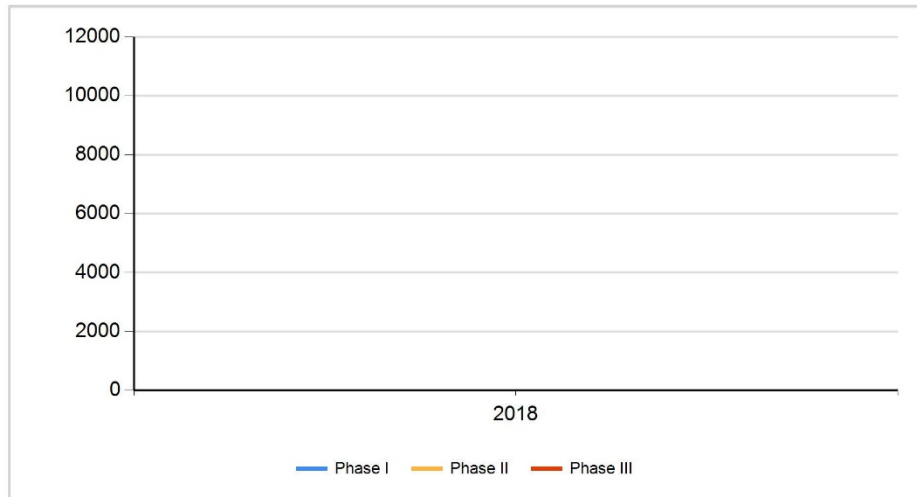


TABLE 6A

ACRES OF PHASE I, II, AND III BOND RELEASES			
Year	Phase III	Phase II	Phase I
2018	9430	10231	10367

CHART 6B HISTORICAL TRENDS
ACRES BONDED FOR DISTURBANCE AND DISTURBED AREA

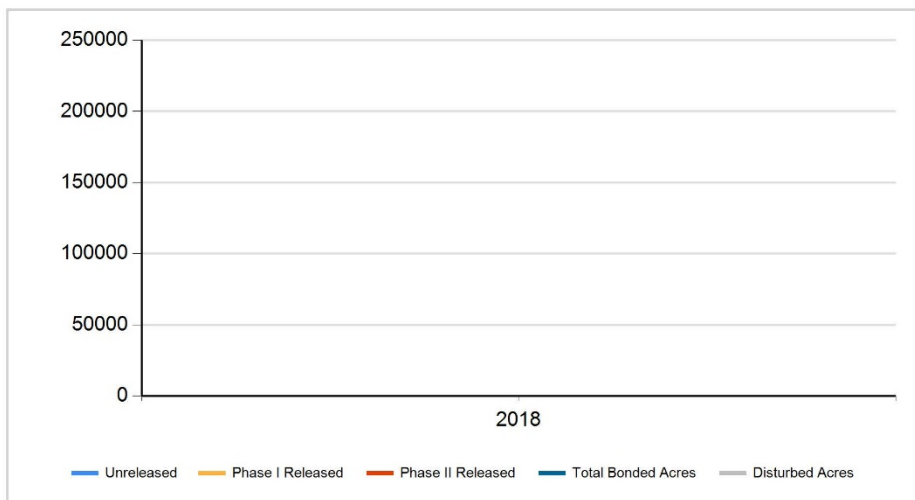


TABLE 6B

AREAS BONDED FOR DISTURBANCE AND DISTURBED AREA					
Year	ACRES BONDED FOR DISTURBANCE				Disturbed Area
	Unreleased	Phase I Released	Phase II Released	Total Bonded Area	
2018	133055.0	35922.0	10858	213552.0	224119.0

TABLE 7

BOND FORFEITURE ACTIVITY (Permanent Program Permits)			
Bond Forfeiture and Reclamation Activity	Number of Sites	Dollars	Acres
Sites with bonds forfeited and collected that were un-reclaimed at the start of the current Evaluation Year (i.e, end of previous Evaluation Year) ¹	110		(28,986)
Sites with bonds forfeited and collected during the current Evaluation Year	8	2,099,851	739
Sites with bonds forfeited and collected that were re-permitted during the current Evaluation Year	0		0
Sites with bonds forfeited and collected that were reclaimed during the current Evaluation Year	11		455
Sites with bonds forfeited and collected that were un-reclaimed at the end of the current Evaluation Year ¹	107		(28,702)
Sites with bonds forfeited but un-collected at the end of the current Evaluation Year	0		0
Forfeiture Sites with Long-Term Water Pollution			
Bonds forfeited, lands reclaimed, but water pollution is still occurring	2		
Bonds forfeited, lands reclaimed, and water treatment is ongoing	0		
Surety/Other Reclamation Activity In Lieu of Forfeiture			
Sites being reclaimed by surety/other party at the start of the current Evaluation Year (i.e., the end of previous Evaluation Year) ²	12		202
Sites where surety/other party agreed during the current Evaluation Year to do reclamation	0		0
Sites being reclaimed by surety/other party that were re-permitted during the current Evaluation Year	0		0
Sites with reclamation completed by surety/other party during the current Evaluation Year ³	12		202
Sites being reclaimed by surety/other party at the end of the current Evaluation Year ²	0		0
¹ Includes data only for those forfeiture sites not fully reclaimed. ² Includes all sites where surety or other party has agreed to complete reclamation and the site is not fully reclaimed. ³ These sites are also reported in Table 6, Surface Coal Mining and Reclamation Activity, because Phase III bond release would be granted on these sites.			

**CHART 7A HISTORICAL TRENDS
NUMBER OF BOND FORFEITURE SITES**

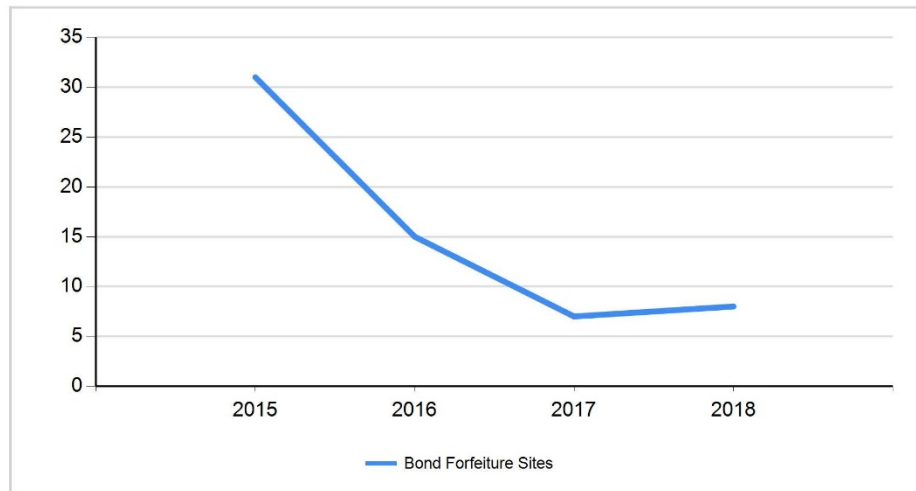


TABLE 7A

NUMBER OF BOND FORFEITURE SITES	
Year	Bond Forfeiture Sites
2015	31
2016	15
2017	7
2018	8

**CHART 7B HISTORICAL TRENDS
ACREAGE OF BOND FORFEITURE SITES**

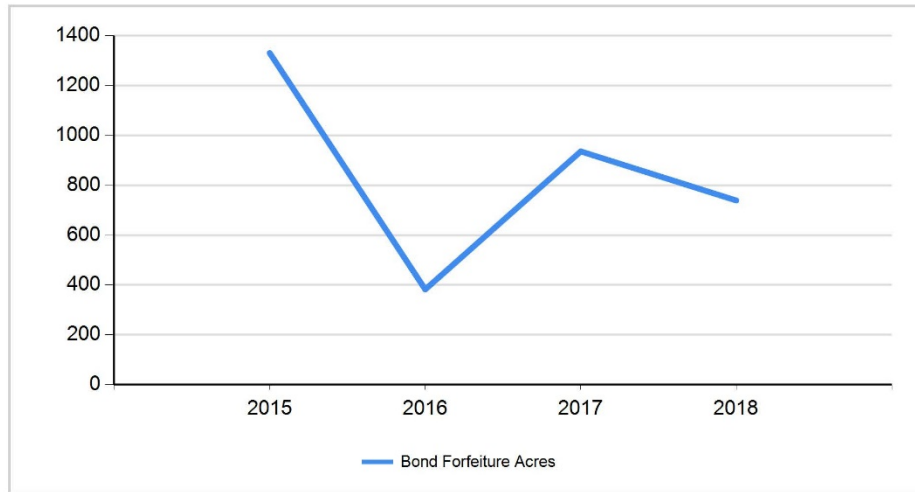


TABLE 7B

ACREAGE OF BOND FORFEITURE SITES	
Year	Acres
2015	1331
2016	382
2017	936
2018	739

**CHART 7C HISTORICAL TRENDS
NUMBER OF SITES WITH WATER POLLUTION STILL
OCCURRING**

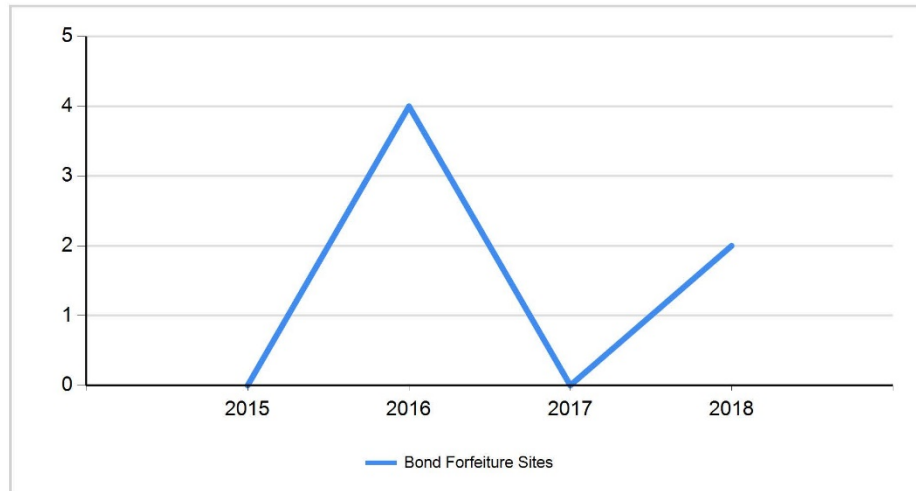


TABLE 7C

NUMBER OF SITES WITH WATER POLLUTION STILL OCCURRING	
Year	Sites
2015	0
2016	4
2017	0
2018	2

**CHART 7D HISTORICAL TRENDS
NUMBER OF SITES WITH WATER TREATMENT ONGOING**

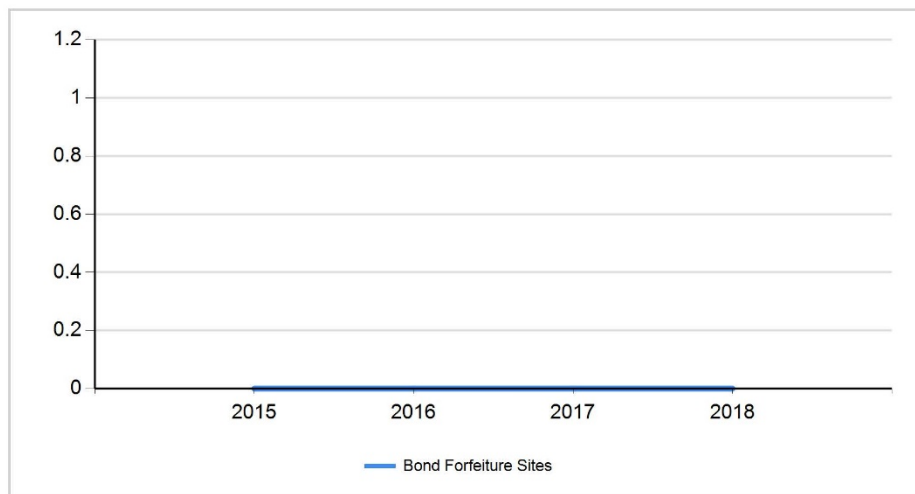


TABLE 7D

NUMBER OF SITES WITH WATER TREATMENT ONGOING	
Year	Sites
2015	0
2016	0
2017	0
2018	0

TABLE 8

REGULATORY AND AML PROGRAMS STAFFING	
Function	Number of FTEs
Regulatory Program	
Permit Review and Maintenance	28.00
Inspection	103.00
Other (supervisory, clerical, administrative, fiscal, personnel, etc.)	38.00
Regulatory Program Total	169.00
AML Program Total	81.00
TOTAL	250.00

**CHART 8A HISTORICAL TRENDS
REGULATORY AND AML PROGRAMS STAFFING**

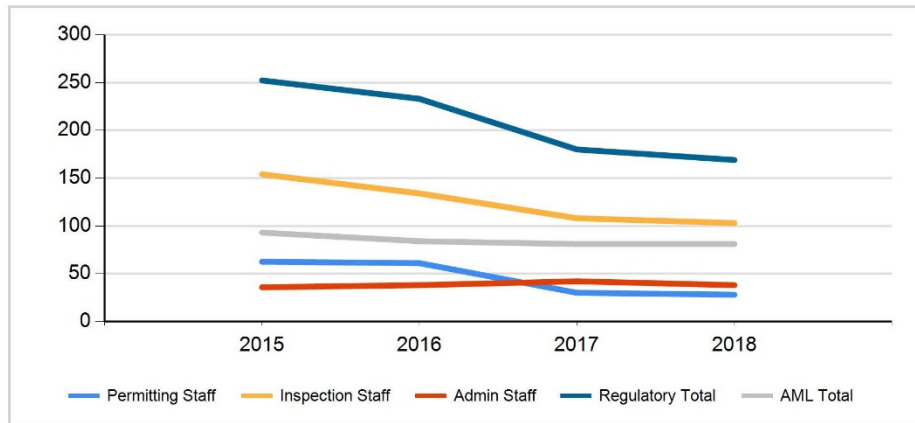


TABLE 8A

REGULATORY AND AML PROGRAMS STAFFING					
Year	Regulatory Program				AML Program
	Permitting	Inspection	Admin	Total	
2015	63	154	36	252	93
2016	61	134	38	233	84
2017	30	108	42	180	81
2018	28	103	38	169	81

TABLE 9

FUNDS GRANTED TO STATE OR TRIBE BY OSM (Actual Dollars Rounded to the Nearest Dollar)			
Type of Funding	Federal Funds Awarded	Total Program Cost	Federal Funds Awarded as a Percentage of Total Program Costs
Regulatory Funding			
Administration and Enforcement Grant	12,238,470		
Other Regulatory Funding, if applicable	0		
Subtotal (Regulatory Funding)	12,238,470	22,811,670	54
Small Operator Assistance Program Grant Funding	0	0	
Abandoned Mine Land Reclamation Funding	12,649,694	12,649,694	100
Watershed Cooperative Agreement Program	0	0	
TOTAL	24,888,164		

**CHART 9A HISTORICAL TRENDS
FUNDS GRANTED TO STATE OR TRIBE BY OSM**

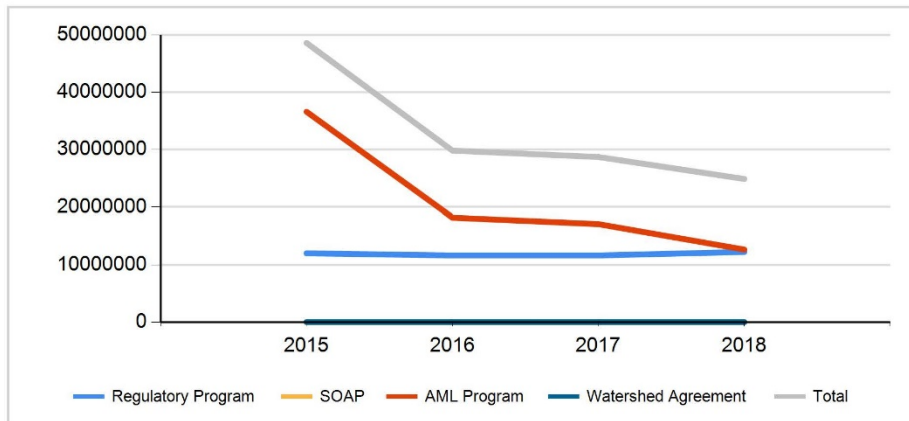


TABLE 9A

FUNDS GRANTED TO STATE OR TRIBE BY OSM				
Year	Regulatory Program	SOAP	AML Program	Total
2015	12,000,854	0	36,613,301	48,614,155
2016	11,631,247	0	18,201,399	29,832,646
2017	11,632,000	0	17,088,577	28,720,577
2018	12,238,470	0	12,649,694	24,888,164

TABLE 10

STATE INSPECTION ACTIVITY INSPECTABLE UNITS FOR WHICH STATE MET REQUIRED INSPECTION FREQUENCY ON AN INSPECTABLE UNIT-BY-INSPECTABLE UNIT BASIS ¹												
Inspectable Units (IUs)	Total number of inspectable units ²	Number of inspections required annually		Number of inspections conducted		IUs Met Complete Inspection Frequency Requirement		IUs Met Partial Inspection Frequency Requirement		IUs Met Complete and Partial Inspection Frequency Requirements		
		Complete inspections	Partial inspections	Complete inspections	Partial inspections	Number	Percent	Number	Percent	Total number of IUs	Number that met inspection frequency	Percent
COAL MINES AND FACILITIES												
Active	1411	5644	11288	6081	10382	1404	100	1411	100	1411	1404	100
Inactive	52	208	0	204	85	52	100	52	100	52	52	100
Abandoned	8	8	0	30	21	8	100	8	100	8	8	100
TOTALS ³	1471	5860	11288	6315	10488	1464	100	1471	100	1471	1464	100
Coal Exploration Activities ⁴		Complete Inspections						Partial Inspections				
Exploration sites with permits		2						3				
Exploration sites with notices		543						113				

¹ Calculated on a site-specific basis.

² Total number includes both permanent program permits and initial program sites.

³ OSM is assuming that all states have gone through the process described in 30 CFR 840.11(h) and 842.11(f) to reduce inspection frequency on abandoned/forfeited sites

⁴ Includes all valid notices and permits. No inspection frequency data are provided since SMCRA does not establish a minimum numerical inspection frequency for coal exploration activities.

⁵ NA - Not Available

**CHART 10A HISTORICAL TRENDS
STATE OR TRIBAL INSPECTION ACTIVITY**

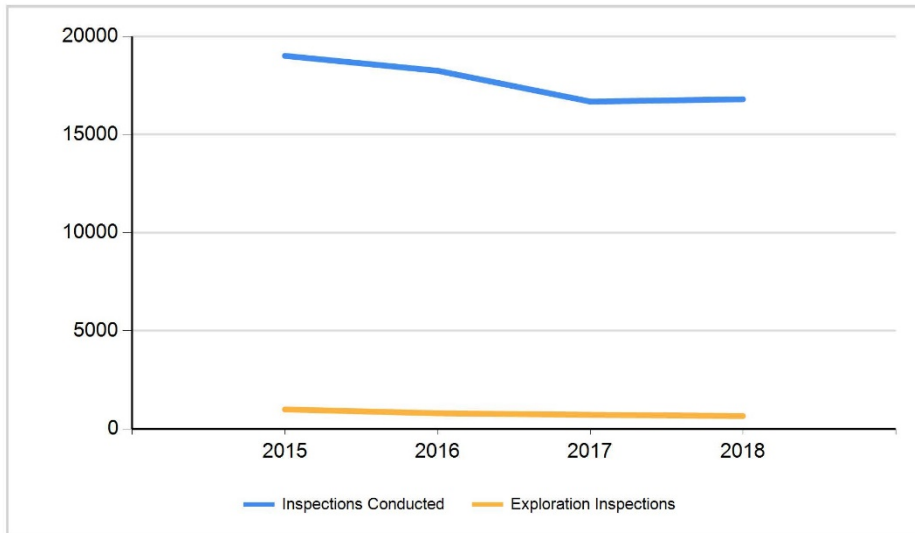


TABLE 10A

STATE OR TRIBAL INSPECTION ACTIVITY		
Year	Inspections Conducted	Exploration Inspections
2015	19013	998
2016	18253	802
2017	16682	724
2018	16803	661

TABLE 11

STATE OR TRIBAL ENFORCEMENT ACTIVITY		
Type of Enforcement Action	Number of Actions ¹	Number of Violations ¹
Notice of Violation	748	1,341
Failure-to-Abate Cessation Order	173	270
Imminent Harm Cessation Order	6	10
¹ Does not include actions and violations that were vacated.		

**CHART 11A HISTORICAL TRENDS
STATE OR TRIBAL ENFORCEMENT ACTIVITY**

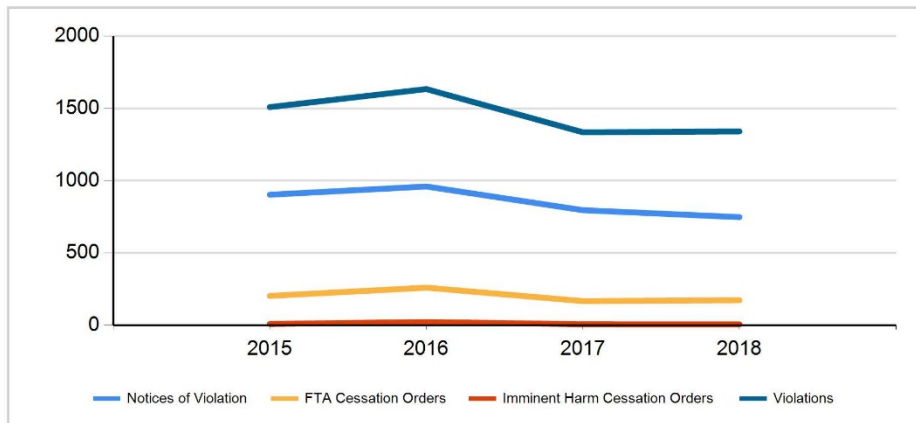


TABLE 11A

STATE OR TRIBAL ENFORCEMENT ACTIVITY				
Year	Notices of Violation	Violations	FTA Cessation Orders	Imminent Harm Cessation Orders
2015	903	1509	203	9
2016	960	1634	260	22
2017	796	1335	167	7
2018	748	1341	173	6

TABLE 12

LANDS UNSUITABLE ACTIVITY		
Activity	Number	Acres
Petitions Received	0	
Petitions Rejected	0	
Petitions Accepted	0	
Decisions Denying Petition	0	
Decisions Declaring Lands Unsuitable	0	0
Decisions Terminating Unsuitable Designations	0	0

**CHART 12A HISTORICAL TRENDS
LANDS UNSUITABLE ACTIVITY**

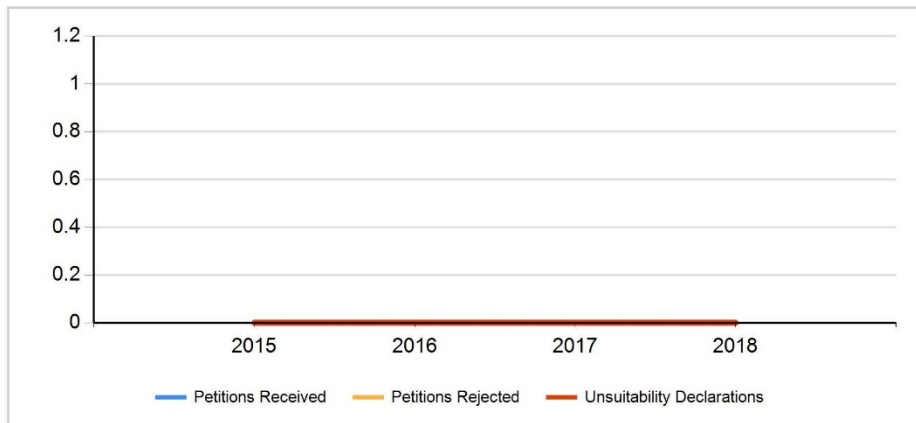


TABLE 12A

LANDS UNSUITABLE ACTIVITY			
Year	Petitions Received	Petitions Rejected	Unsuitability Declarations
2015	0	0	0
2016	0	0	0
2017	0	0	0
2018	0	0	0

**CHART 12B HISTORICAL TRENDS
ACRES DECLARED UNSUITABLE**

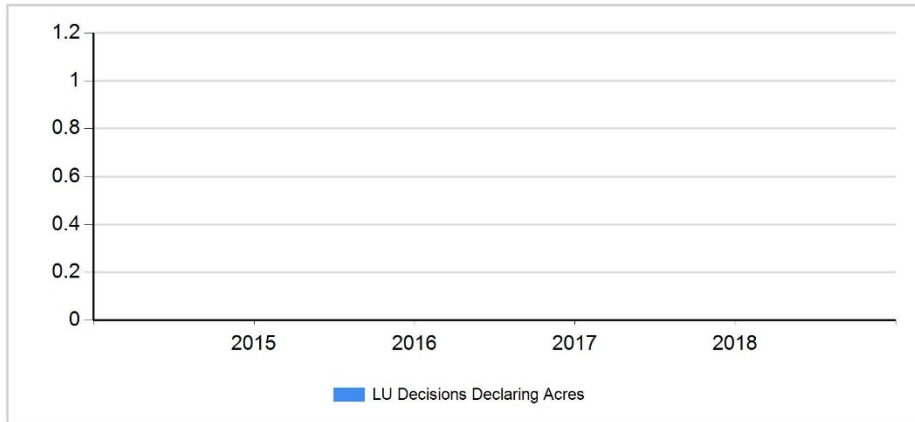


TABLE 12B

ACRES DECLARED UNSUITABLE	
Year	Acres Declared Unsuitable
2015	0.0
2016	0.0
2017	0.0
2018	0.0

TABLE 13

OSM OVERSIGHT ACTIVITY					
Oversight Inspections and Site Visits					
	Complete		Partial		
	Joint	Non-Joint	Joint	Non-Joint	Total
Oversight Inspections	306	0	70	6	382
	Technical Assistance		Other		Total
Site Visits	1		9		10
Violations Observed by OSM and Citizen Requests for Inspection ¹					
Type of Action					Total number of each action
How many violations were observed by OSM on oversight inspections?					437
Of the violations observed, how many did OSM defer to State action during inspections?					205
Of the violations observed, how many did OSM refer to the State through Ten-Day Notices? ²					6
How many Ten-Day Notices did OSM Issue for observed violations? ³					2
How many Ten-Day Notices did OSM issue to refer citizen requests for inspection?					0
How many Notices of Violation did OSM issue?					0
How many Failure-to-Abate Cessation Orders did OSM issue?					0
How many Imminent Harm Cessation Orders did OSM issue?					0
OSM Action for Delinquent Reporting or Non-Payment of Federal AML Reclamation Fees					
How many Ten-Day Notices for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?					0
How many Notices of Violation for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?					1
How many Federal Failure-to-Abate Cessation Orders for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?					0
¹ This section does not include actions for delinquent reporting or non-payment of Federal AML fees that are reported in the last section of the table.					
² Number of violations contained in Ten-Day Notices not including those issued to refer citizen requests for inspection.					
³ Number of Ten-Day Notices issued not including those to refer citizen requests for inspection.					

**CHART 13A HISTORICAL TRENDS
OSM OVERSIGHT ACTIVITY**

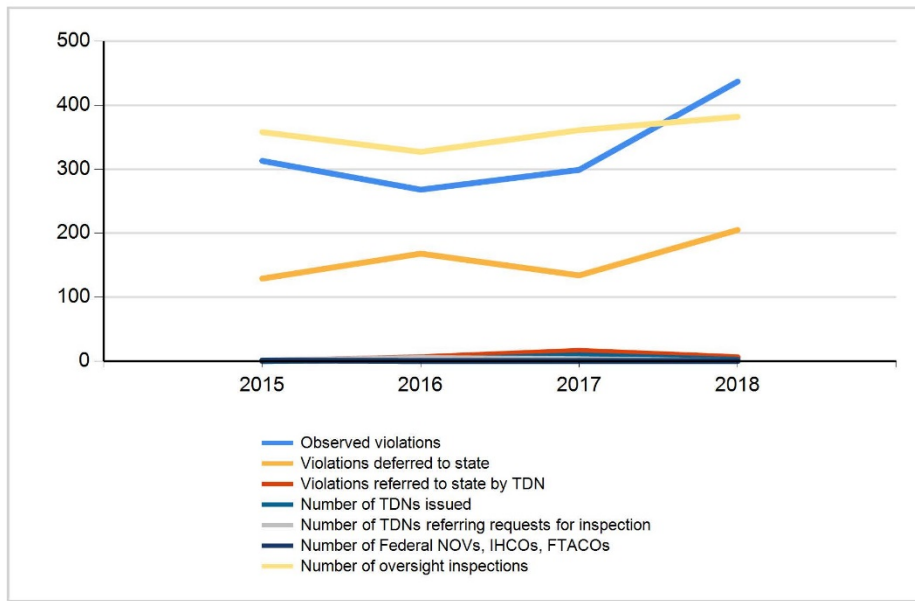


TABLE 13A

Year	Number of violations observed on OSM oversight inspections	Number of violations deferred to state action	Number of violations referred to state by TDN	Number of TDN's issued	Number of TDN's issued to refer requests for inspection	Number of Federal NOV, FTACOs, & IHCOs issued	Number of oversight inspections
2015	313	129	0	0	1	1	358
2016	268	168	6	2	5	0	327
2017	299	134	16	9	3	0	361
2018	437	205	6	2	0	0	382

TABLE 14

STATUS OF ACTION PLANS						
Action Plan ID	Problem Type ¹	Problem Title	Problem Description	Date Action Plan Initiated	Scheduled Completion Date	Actual Completion Date
None						
¹ Problem Type: "PA" indicates a required Program change under subchapter T or 732 "RP" indicates a Regulatory Program implementation or administrative problem						

TABLE 15
(Optional)

POST-MINING LAND USE ACREAGE OF SITES FULLY RECLAIMED (Phase III bond release or termination of jurisdiction under the Initial Program)	
Land Use¹	Acres Released
Cropland	66.33
Pasture/Hayland	4,035.22
Grazingland	0.00
Forestry	1,463.09
Residential	4.81
Industrial/Commercial	43.29
Recreation	0.00
Fish & Wildlife Habitat	3,817.19
Developed Water Resources	0.00
Undeveloped land or no current use or land management	0.00
Other - Public Utilities	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Sub-Total Other	0.00
Total	9,429.93

¹ Land uses as defined in 30 CFR 701.5 or "Other" as defined under the state or tribal program

**CHART 15A HISTORICAL TRENDS
POST MINING LAND USE ACREAGES**

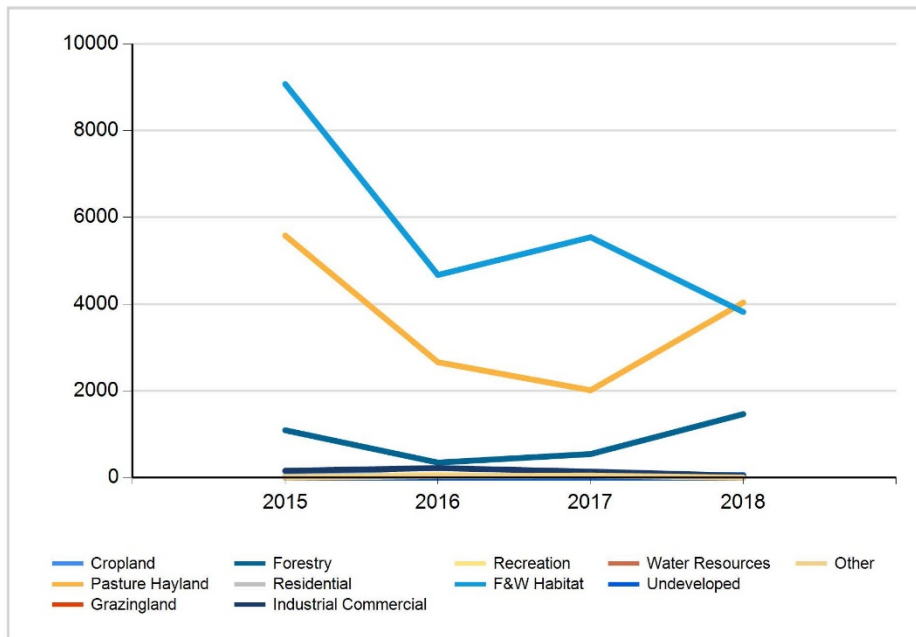


TABLE 15A

Year	Cropland	Pasture Hay	Grazing Land	Forest	Residential	Industrial Comm.	Recreation	F&W Hab.	Water Resources	Undeveloped	Other
2015	144	5579	0	1091	22	157	4	9071	0	0	0
2016	0	2659	0	346	54	219	59	4671	0	0	34
2017	0	2013	0	542	5	137	0	5540	0	0	46
2018	66	4035	0	1463	5	43	0	3817	0	0	0

XI. Appendix 2 State Comments on the Report

MATTHEW G. BEVIN
GOVERNOR



**ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR NATURAL RESOURCES**

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601

CHARLES G. SNAVELY
SECRETARY

JOHN D. SMALL
COMMISSIONER

TD

Michael Castle
Lexington Field Office
Office of Surface Mining Reclamation & Enforcement
2675 Regency Road
Lexington, Kentucky 40503

RE: Comments pertaining to the Draft EY 2018 Report

Dear Mr. Castle,

In response to the draft EY 2018 Annual Evaluation Report provided by the Office of Surface Mining Reclamation & Enforcement (OSMRE) Lexington Field Office (LFO), Kentucky Department for Natural Resources (KYDNR) provides the following comments:

- 1) Page 10, Bond Forfeiture Report:
 - a. KYDNR does not agree with the inclusion of findings from a "Draft Bond Forfeiture Report" with no opportunity for review and comment.
 - b. Additional information regarding the four (4) permits found to have insufficient bond to complete reclamation should be provided. The Kentucky Division of Mine Permits (KYDMP) initiated a protocol to re-evaluate bond adequacy during midterm review beginning in 2012.
 - i. Were midterm bond increases received for the four (4) permits referenced in the report?
 - ii. Were forfeitures of the four (4) permits referenced the result of failing to pay the required midterm bond increases?
 1. If forfeiture of the four (4) permits in question was the result of failing to post the required midterm bond increases, KYDNR is being unfairly penalized for enforcing the program.
 - c. KYDNR disagrees with the use of reclamation cost estimates as the determinant for bonding adequacy. The DAML reclamation cost estimate is the first step in the process to reclaim a forfeited permit. A better measure of bond adequacy would be the comparison of the forfeited bond amount to the actual costs expended to reclaim a permit. Utilization of a reclamation cost estimate should not be the measuring stick to determine bonding adequacy.

- 2) Page 37, Table and 2nd paragraph: KYDNR would like clarification of the statement, "OSMRE observed 437 violations during oversight inspections, 47 percent of which were cited during oversight inspections." Of the 205 violations (47%) "deferred to the state" during oversight inspections:
- a. How many of the violations were new violations that occurred since the previous complete inspection?
 - b. How many were existing violations where KYDNR failed to take enforcement action?

In the Table, the column "Deferred to State" appears to infer to the reader that if not for OSMRE oversight, KYDNR would not have taken action on the 205 violations deferred during oversight, which is patently false. It would be more accurate to state "Violations cited by the State during oversight inspections."

I appreciate the opportunity to comment on the EY2018 draft Annual Report. If you have any questions, please do not hesitate to contact me at 502-782-6773 or JohnD.Small@ky.gov.

Sincerely,



John D. Small, Commissioner
Department for Natural Resources

**XII. Appendix 3 State Non-Compliance
Data (Listed by Descending Number of
Non-Compliances)**

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
REVELATION ENERGY LLC	134	259	92	240	331,830.64	47,052.87
PREMIER ELKHORN COAL LLC	32	71	15	35	46,891.74	9,518.49
KENTUCKY FUEL CORPORATION	23	44	15	38	53,266.60	5,989.61
ERP ENVIRONMENTAL FUND INC	18	18	13	14	15,632.77	3,783.14
KNOTT COUNTY COAL, LLC	16	26	10	20	30,324.25	1,283.24
NALLY & HAMILTON ENTERPRISES INC	16	24	14	62	41,139.14	13,020.86
LIBERTY MANAGEMENT LLC	16	22	11	32	19,307.43	10,377.27
CAMBRIAN COAL LLC	15	33	7	17	6,782.43	3,976.50
APEX ENERGY INC	14	22	8	29	16,153.40	4,010.70
VIKING ACQUISITION GROUP LLC	14	18	3	3	903.56	225.86
EMBER ENERGY LLC	13	36	5	18	12,725.73	6,088.89
VIRGINIA FUEL CORPORATION	13	17	8	14	17,626.21	991.91
SIDNEY COAL COMPANY INC	12	16	10			
MCCOY ELKHORN COAL LLC DBA MCCOY ELKHORN COAL COMPANY	12	15	8	10	32,141.52	282.25
METELECTRIC ENERGY LLC	11	39	1	1	636.95	250.00
MATT/CO INC	11	19	9	22	15,145.70	430.03
DEANE MINING LLC	11	16	8	17	25,119.08	2,021.65
APPALACHIAN MINING AND RECLAMATION LLC	10	22	2	2	757.13	82.15
RAVEN ENERGY INC	9	30	2	1	182.18	105.00
ARMSTRONG COAL COMPANY INC	9	17	6	24	55,499.13	6,616.80
M J K MINING INCORPORATED	8	16	2	3	365.91	141.50
ACPKYI LLC	8	13	2	1	127.48	24.00
CROCKETT COLLIERIES (KY) INC	8	12	3	3	1,388.51	68.11
SIDNEY COAL COMPANY LLC	8	8	8	5	202.42	126.80
CAM MINING LLC	7	17	5	19	30,747.52	1,984.49
BOWIE REFINED COAL, LLC	7	16	1	1	440.33	420.33
LCC KENTUCKY LLC	7	13	6	10	4,121.02	1,682.96
CLINTWOOD ELKHORN MINING LLC	7	12	5	37	42,190.10	1,668.73
IKERD MINING, LLC	7	11	4	1	119.71	80.00
MIDDLE FORK DEVELOPMENT SERVICES NO 2 LLC	7	10	2	2	498.21	297.00
DAVIS ENERGY, LLC	6	13	2	3	684.19	229.00
EASTERN KENTUCKY MINING INC	6	12	1	1	329.93	120.00
B & W RESOURCES INC	6	9	6	34	11,988.23	4,572.51
LANDFALL MINING INCORPORATED	6	9	3	3	117.60	60.00
J R MINING INC	6	8	2	2	120.23	51.00
CZAR COAL CORPORATION	5	12	4	19	29,795.66	3,806.57
SPURLOCK MINING, LLC	5	11	4	37	26,149.26	1,620.19
D & J COAL COMPANY LLC	5	10	2	3	1,990.92	975.00
JRL COAL INC	5	10	3	10	6,661.16	1,197.72
ALDEN RESOURCES LLC	5	7	5	23	10,122.82	1,616.42
MIDDLESBORO MINING OPERATIONS INC	5	6	5	23	14,022.62	2,564.15
COVOL FUELS NO 3 LLC	5	5	3	8	3,398.63	356.85
SEQUOIA ENERGY LLC	5	5	3	12	22,964.14	953.38
INFINITY ENERGY, INC	4	14	2	3	1,099.71	450.25
BEECH CREEK COAL COMPANY, LLC	4	11	1	1	1,133.85	195.00

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
BETHEL COAL COMPANY, INC	4	10	1	1	85.90	35.00
KAMCO LLC	4	8	2	5	660.57	161.00
MOUNTAINSIDE COAL CO INC	4	8	4	6	2,610.02	890.70
OXFORD MINING COMPANY-KENTUCKY LLC	4	7	3	7	5,784.50	2,593.13
CORBIN MINING LLC	4	6	1	1	330.15	60.00
EMPIRE COAL PROCESSING LLC	4	6	1	2	364.56	69.00
PHOENIX RESOURCES, LLC	4	6	1	1	154.68	130.00
FORTRESS RESOURCES LLC DBA MCCOY ELKHORN COAL CO	4	5	4	4	3,529.66	517.15
MEG MINE LLC	4	5	2	2	85.52	70.00
RIO MINING LLC	4	5	1	1	87.51	27.81
BEECH FORK PROCESSING, LLC	4	4	3	16	15,304.93	2,749.88
COOK AND SONS MINING INC	4	4	1	3	2,076.59	494.33
EVANS COAL CORP	4	4	4	4	1,522.53	390.70
L & R COALS	4	4	1			
SOUTHFORK COAL CO	4	4	4	4	1,781.31	124.34
WARRIOR COAL LLC	4	4	3	9	39,892.88	698.00
GCIE, INC	3	14	1	1	191.90	35.00
ADAMS & BURKE CONTRACTORS & DEVELOPERS LLC	3	11	1			
1ST CAPITAL ENERGY AND COAL LLC	3	9	1	1	91.79	22.00
HARLAN-CUMBERLAND COAL COMPANY LLC	3	7	3	5	13,985.78	559.15
DDB ENERGY RESOURCES LLC	3	5	3	3	4,374.76	144.55
NFC MINING INC	3	5	1	3	71.07	31.98
CARBONADO MINE 3 LLC	3	4	1	1	283.30	100.00
ELKVIEW RECLAMATION & PROCESSING LLC	3	4	3	3	78.09	44.00
STURGEON MINING COMPANY INC	3	4	3	6	2,206.81	917.00
TRITON ENERGY COAL INC	3	4	1	1	10.43	6.00
COAL OPERATORS 1 LLC	3	3	1	2	421.36	269.00
DOUBLE MOUNTAIN MINING, LLC	3	3	3	5	4,028.59	1,033.18
HARLAN RECLAMATION SERVICES LLC	3	3	2			
MATERGY INC	3	3	3	9	14,877.91	243.01
WESTERN KENTUCKY MINERALS, INC	3	3	3	4	1,719.10	1,197.00
A & G COAL CORPORATION	2	6	1	1	690.55	230.00
HIGH RIDGE MINING LLC	2	6	2	5	2,717.01	408.34
BLUE DIAMOND MINING, LLC	2	5	2	46	68,282.33	4,211.24
DUSTY DIAMOND COMPANY INC	2	5	1	1	2,001.00	220.00
HYDEN DEVELOPMENT EAST LLC	2	5	1	1	238.91	40.00
SAMUEL COAL COMPANY INC	2	5	2	2	1,405.50	22.25
STAFLAND ENERGY LLC	2	5	1	1	317.36	25.41
HARDSHELL TIPPLES INC	2	4	1	1	682.23	6.62
KOPPER GLO MINING LLC	2	4	1	2	715.30	300.00
PINE BRANCH MINING, LLC	2	4	1	13	8,574.68	5,974.47
LOCUST GROVE INC	2	3	2	10	4,433.66	1,744.08
MAYO RESOURCES INC	2	3	1	4	3,260.74	589.34
OLD KEENE COAL LLC	2	3	1	1	69.75	69.75

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
RED FLAME COAL COMPANY	2	3	2	2	1,149.34	82.00
BIG K PROCESSING, INC	2	2	1			
DEAN COAL & STONE, LLC	2	2	1	1	55.90	12.00
DOUBLE BRANCH ENERGY LLC	2	2	1	6	5,203.61	180.80
GENESIS GROUP LLC	2	2	1	1	44.73	9.00
HARTSHORNE MINING, LLC	2	2	1	4	2,827.70	118.70
IBCS MINING INC KENTUCKY DIVISION	2	2	2	4	283.91	160.00
MINE RITE COAL CO INC	2	2	1	2	601.67	495.00
UNITED FARMING INC	2	2	2	3	435.24	152.00
WEBSTER COUNTY COAL LLC	2	2	1	8	47,510.82	659.60
WELLMORE COAL CORPORATION DBA THE BLACK DIAMOND CO WINN ENERGY LLC	2	2	2	15	15,413.15	481.00
RIO MINING MANAGEMENT LLC	2	2	1	1	66.70	30.00
RIO MINING MANAGEMENT LLC	1	5	1	1	191.70	85.00
COVOL FUELS NO 2 LLC	1	4	1	1	3,308.70	383.12
MC MINING LLC	1	4	1	3	1,050.80	193.00
SOUTHBOUND COAL, LLC	1	4	1	2	838.96	180.00
CLEAR ENERGY CORPORATION	1	3	1	1	80.80	62.00
G & G MINES LLC	1	3	1	1	34.60	28.00
CLAY LAUREL MINING INC	1	2	1	2	100.47	37.00
D & C MINING CORPORATION	1	2	1	1	12.75	12.75
DIXIE FUEL COMPANY LLC	1	2	1	4	1,703.99	713.32
ED GAUNT	1	2	1	1	2.50	2.50
IKERD TERMINAL COMPANY, LLC	1	2	1			
MONTANA BAKKEN LLC	1	2	1	5	3,086.69	259.41
NOBLE CONSTRUCTION	1	2	1	2	168.15	71.00
PRIME ENERGY DEVELOPMENT LLC	1	2	1	1	383.21	6.00
REX COAL COMPANY INC	1	2	1	5	6,571.06	81.70
ROCKCASTLE MINING COMPANY INC	1	2	1	1	136.80	112.44
AMERICAN HIGHWALL MINING LLC	1	1	1	4	798.56	61.76
ARGUS ENERGY LLC	1	1	1	5	6,357.73	488.96
BIG SANDY LAND COMPANY LLC	1	1	1	2	1,279.30	95.00
CALVARY ENTERPRISES, LLC	1	1	1	1	800.19	6.00
CHEYENNE MINING, INC	1	1	1	6	4,666.13	185.89
COVENANT COAL CORPORATION INC	1	1	1	1	780.96	19.00
DALCO CORPORATION	1	1	1	1	60.75	45.00
ENTERPRISE MINING COMPANY LLC	1	1	1	1	615.42	50.00
EXECUTIVE COAL LLC	1	1	1	2	93.00	52.94
FOUR STAR RESOURCES LLC	1	1	1	4	863.15	189.22
GCAS CORPORATION	1	1	1	1	31.69	1.00
HYLTON & WILLIAMS COAL COMPANY INC	1	1	1	1	64.00	8.50
KINGDOM COAL LLC	1	1	1	10	21,857.46	470.10
KY MINES LLC	1	1	1	2	2,326.44	23.00
LABCO LLC	1	1	1	1	20.18	0.00
LEXINGTON COAL COMPANY LLC	1	1	1	58	57,489.03	7,410.95
LONE MOUNTAIN PROCESSING LLC	1	1	1	5	34,808.55	124.32

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
LONG FORK COAL COMPANY LLC	1	1	1	1	10.94	6.04
MARTIN COUNTY COAL CORPORATION	1	1	1			
MASON COAL INC	1	1	1	3	3,405.30	17.08
ROCKHAMPTON ENERGY LLC	1	1	1	2	3,304.60	44.40
SAFECO, INC	1	1	1	1	19.00	9.16
UC MINING LLC	1	1	1	2	151.67	132.60
WILMAY LAND HOLDINGS INC	1	1	1	1	203.90	20.00

**XIII. Appendix 4 State Non-Compliance
Data (Listed by Permittee
Alphabetically)**

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
1ST CAPITAL ENERGY AND COAL LLC	3	9	1	1	91.79	22.00
A & G COAL CORPORATION	2	6	1	1	690.55	230.00
ACPKY1 LLC	8	13	2	1	127.48	24.00
ADAMS & BURKE CONTRACTORS & DEVELOPERS LLC	3	11	1			
ALDEN RESOURCES LLC	5	7	5	23	10,122.82	1,616.42
AMERICAN HIGHWALL MINING LLC	1	1	1	4	798.56	61.76
APEX ENERGY INC	14	22	8	29	16,153.40	4,010.70
APPALACHIAN MINING AND RECLAMATION LLC	10	22	2	2	757.13	82.15
ARGUS ENERGY LLC	1	1	1	5	6,357.73	488.96
ARMSTRONG COAL COMPANY INC	9	17	6	24	55,499.13	6,616.80
B & W RESOURCES INC	6	9	6	34	11,988.23	4,572.51
BEECH CREEK COAL COMPANY, LLC	4	11	1	1	1,133.85	195.00
BEECH FORK PROCESSING, LLC	4	4	3	16	15,304.93	2,749.88
BETHEL COAL COMPANY, INC	4	10	1	1	85.90	35.00
BIG K PROCESSING, INC	2	2	1			
BIG SANDY LAND COMPANY LLC	1	1	1	2	1,279.30	95.00
BLUE DIAMOND MINING, LLC	2	5	2	46	68,282.33	4,211.24
BOWIE REFINED COAL, LLC	7	16	1	1	440.33	420.33
CALVARY ENTERPRISES, LLC	1	1	1	1	800.19	6.00
CAM MINING LLC	7	17	5	19	30,747.52	1,984.49
CAMBRIAN COAL LLC	15	33	7	17	6,782.43	3,976.50
CARBONADO MINE 3 LLC	3	4	1	1	283.30	100.00
CHEYENNE MINING, INC	1	1	1	6	4,666.13	185.89
CLAY LAUREL MINING INC	1	2	1	2	100.47	37.00
CLEAR ENERGY CORPORATION	1	3	1	1	80.80	62.00
CLINTWOOD ELKHORN MINING LLC	7	12	5	37	42,190.10	1,668.73
COAL OPERATORS 1 LLC	3	3	1	2	421.36	269.00
COOK AND SONS MINING INC	4	4	1	3	2,076.59	494.33
CORBIN MINING LLC	4	6	1	1	330.15	60.00
COVENANT COAL CORPORATION INC	1	1	1	1	780.96	19.00
COVOL FUELS NO 2 LLC	1	4	1	1	3,308.70	383.12
COVOL FUELS NO 3 LLC	5	5	3	8	3,398.63	356.85
CROCKETT COLLIERIES (KY) INC	8	12	3	3	1,388.51	68.11
CZAR COAL CORPORATION	5	12	4	19	29,795.66	3,806.57
D & C MINING CORPORATION	1	2	1	1	12.75	12.75
D & J COAL COMPANY LLC	5	10	2	3	1,990.92	975.00
DALCO CORPORATION	1	1	1	1	60.75	45.00
DAVIS ENERGY, LLC	6	13	2	3	684.19	229.00
DDB ENERGY RESOURCES LLC	3	5	3	3	4,374.76	144.55
DEAN COAL & STONE, LLC	2	2	1	1	55.90	12.00
DEANE MINING LLC	11	16	8	17	25,119.08	2,021.65
DIXIE FUEL COMPANY LLC	1	2	1	4	1,703.99	713.32
DOUBLE BRANCH ENERGY LLC	2	2	1	6	5,203.61	180.80
DOUBLE MOUNTAIN MINING, LLC	3	3	3	5	4,028.59	1,033.18
DUSTY DIAMOND COMPANY INC	2	5	1	1	2,001.00	220.00

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
EASTERN KENTUCKY MINING INC	6	12	1	1	329.93	120.00
ED GAUNT	1	2	1	1	2.50	2.50
ELKVIEW RECLAMATION & PROCESSING LLC	3	4	3	3	78.09	44.00
EMBER ENERGY LLC	13	36	5	18	12,725.73	6,088.89
EMPIRE COAL PROCESSING LLC	4	6	1	2	364.56	69.00
ENTERPRISE MINING COMPANY LLC	1	1	1	1	615.42	50.00
ERP ENVIRONMENTAL FUND INC	18	18	13	14	15,632.77	3,783.14
EVANS COAL CORP	4	4	4	4	1,522.53	390.70
EXECUTIVE COAL LLC	1	1	1	2	93.00	52.94
FORTRESS RESOURCES LLC DBA MCCOY ELKHORN COAL CO	4	5	4	4	3,529.66	517.15
FOUR STAR RESOURCES LLC	1	1	1	4	863.15	189.22
G & G MINES LLC	1	3	1	1	34.60	28.00
GCAS CORPORATION	1	1	1	1	31.69	1.00
GCIE, INC	3	14	1	1	191.90	35.00
GENESIS GROUP LLC	2	2	1	1	44.73	9.00
HARDSHELL TIPPLES INC	2	4	1	1	682.23	6.62
HARLAN RECLAMATION SERVICES LLC	3	3	2			
HARLAN-CUMBERLAND COAL COMPANY LLC	3	7	3	5	13,985.78	559.15
HARTSHORNE MINING, LLC	2	2	1	4	2,827.70	118.70
HIGH RIDGE MINING LLC	2	6	2	5	2,717.01	408.34
HYDEN DEVELOPMENT EAST LLC	2	5	1	1	238.91	40.00
HVLTON & WILLIAMS COAL COMPANY INC	1	1	1	1	64.00	8.50
IBCS MINING INC KENTUCKY DIVISION	2	2	2	4	285.91	160.00
IKERD MINING, LLC	7	11	4	1	119.71	80.00
IKERD TERMINAL COMPANY, LLC	1	2	1			
INFINITY ENERGY, INC	4	14	2	3	1,099.71	450.25
J R MINING INC	6	8	2	2	120.23	51.00
JMEG MINE LLC	4	5	2	2	85.52	70.00
JRL COAL INC	5	10	3	10	6,661.16	1,197.72
KAMCO LLC	4	8	2	5	660.57	161.00
KENTUCKY FUEL CORPORATION	23	44	15	38	53,266.60	5,989.61
KINGDOM COAL LLC	1	1	1	10	21,857.46	470.10
KNOTT COUNTY COAL, LLC	16	26	10	20	30,324.25	1,283.24
KOPPER GLO MINING LLC	2	4	1	2	715.30	300.00
KY MINES LLC	1	1	1	2	2,326.44	23.00
L & R COALS	4	4	1			
LABCO LLC	1	1	1	1	20.18	0.00
LANDFALL MINING INCORPORATED	6	9	3	3	117.60	60.00
LCC KENTUCKY LLC	7	13	6	10	4,121.02	1,682.96
LEXINGTON COAL COMPANY LLC	1	1	1	58	57,489.03	7,410.95
LIBERTY MANAGEMENT LLC	16	22	11	32	19,307.43	10,377.27
LOCUST GROVE INC	2	3	2	10	4,433.66	1,744.08
LONE MOUNTAIN PROCESSING LLC	1	1	1	5	34,808.55	124.32
LONG FORK COAL COMPANY LLC	1	1	1	1	10.94	6.04
M J K MINING INCORPORATED	8	16	2	3	365.91	141.50

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
MARTIN COUNTY COAL CORPORATION	1	1	1			
MASON COAL INC	1	1	1	3	3,405.30	17.08
MATERGY INC	3	3	3	9	14,877.91	243.01
MATT/CO INC	11	19	9	22	15,145.70	430.03
MAYO RESOURCES INC	2	3	1	4	3,260.74	589.34
MC MINING LLC	1	4	1	3	1,050.80	193.00
MCCOY ELKHORN COAL LLC DBA MCCOY ELKHORN COAL COMPANY	12	15	8	10	32,141.52	282.25
METELECTRIC ENERGY LLC	11	39	1	1	636.95	250.00
MIDDLE FORK DEVELOPMENT SERVICES NO 2 LLC	7	10	2	2	498.21	297.00
MIDDLESBORO MINING OPERATIONS INC	5	6	5	23	14,022.62	2,564.15
MINE RITE COAL CO INC	2	2	1	2	601.67	495.00
MONTANA BAKKEN LLC	1	2	1	5	3,086.69	259.41
MOUNTAINSIDE COAL CO INC	4	8	4	6	2,610.02	890.70
NALLY & HAMILTON ENTERPRISES INC	16	24	14	62	41,139.14	13,020.86
NFC MINING INC	3	5	1	3	71.07	31.98
NOBLE CONSTRUCTION	1	2	1	2	168.15	71.00
OLD KEENE COAL LLC	2	3	1	1	69.75	69.75
OXFORD MINING COMPANY-KENTUCKY LLC	4	7	3	7	5,784.50	2,593.13
PHOENIX RESOURCES, LLC	4	6	1	1	154.68	130.00
PINE BRANCH MINING, LLC	2	4	1	13	8,574.68	5,974.47
PREMIER ELKHORN COAL LLC	32	71	15	35	46,891.74	9,518.49
PRIME ENERGY DEVELOPMENT LLC	1	2	1	1	383.21	6.00
RAVEN ENERGY INC	9	30	2	1	182.18	105.00
RED FLAME COAL COMPANY	2	3	2	2	1,149.34	82.00
REVELATION ENERGY LLC	134	259	92	240	331,830.64	47,052.87
REX COAL COMPANY INC	1	2	1	5	6,571.06	81.70
RIO MINING LLC	4	5	1	1	87.51	27.81
RIO MINING MANAGEMENT LLC	1	5	1	1	191.70	85.00
ROCKCASTLE MINING COMPANY INC	1	2	1	1	136.80	112.44
ROCKHAMPTON ENERGY LLC	1	1	1	2	3,304.60	44.40
SAFECO, INC	1	1	1	1	19.00	9.16
SAMUEL COAL COMPANY INC	2	5	2	2	1,405.50	22.25
SEQUOIA ENERGY LLC	5	5	3	12	22,964.14	953.38
SIDNEY COAL COMPANY INC	12	16	10			
SIDNEY COAL COMPANY LLC	8	8	8	5	202.42	126.80
SOUTHBOUND COAL, LLC	1	4	1	2	838.96	180.00
SOUTHFORK COAL CO	4	4	4	4	1,781.31	124.34
SPURLOCK MINING, LLC	5	11	4	37	26,149.26	1,620.19
STAFLAND ENERGY LLC	2	5	1	1	317.36	25.41
STURGEON MINING COMPANY INC	3	4	3	6	2,206.81	917.00
TRITON ENERGY COAL INC	3	4	1	1	10.43	6.00
UC MINING LLC	1	1	1	2	151.67	132.60
UNITED FARMING INC	2	2	2	3	435.24	152.00
VIKING ACQUISITION GROUP LLC	14	18	3	3	903.56	225.86
VIRGINIA FUEL CORPORATION	13	17	8	14	17,626.21	991.91

Permittee	# NCs	Violations	Permits in Violation	Total Permits	Permitted Acres	Disturbed Acres
WARRIOR COAL LLC	4	4	3	9	39,892.88	698.00
WEBSTER COUNTY COAL LLC	2	2	1	8	47,510.82	659.60
WELLMORE COAL CORPORATION DBA THE BLACK DIAMOND CO	2	2	2	15	15,413.15	481.00
WESTERN KENTUCKY MINERALS, INC	3	3	3	4	1,719.10	1,197.00
WILMAY LAND HOLDINGS INC	1	1	1	1	203.90	20.00
WINN ENERGY LLC	2	2	1	1	66.70	30.00